ANALYSIS OF
THE EVOLUTION OF
MUSICAL FORM

MARGARET H. GLYN

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# ANALYSIS OF THE EVOLUTION OF MUSICAL FORM

*BY THE SAME AUTHOR*

THE RHYTHMIC CONCEPTION OF MUSIC

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# ANALYSIS OF THE EVOLUTION OF MUSICAL FORM

BY

MARGARET H. GLYN

AUTHOR OF "THE RHYTHMIC CONCEPTION OF MUSIC," ETC.

LONGMANS, GREEN AND CO.
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## *To Music*

*One art thou, Music, indivisible,*
*A voice that from on high doth visit us,*
*That cometh ever singing a new song.*
*And he who fain would speak his thought of thee*
*Falls to a silent wonder as he hears*
*The footstep of thy coming ; yea, and when*
*Like the deep sea thy tide doth leave his shore,*
*The silence grows upon thy benison.*
*Through soul of man thou wilt declare thyself !*
*But when we cease to speak thy rhythmic tongue*
*We are like children stammering of thee*
*Oh Music, who art greater than our thoughts.*

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# PREFACE

The general drift of this theory of music has already been indicated in "The Rhythmic Conception of Music." The object of the present volume may be briefly stated to be the application of the evolutionary principle to practical music, the essential motive power of which is to be found in rhythm. By this means it is possible to produce an analysis which, as promised in the former volume, "shall weld all the various parts of musical education into one consistent and logical whole."

The theory has arisen not from abstract ideas, but out of the study of music. It is not so much a theory about music as an endeavour to translate into the terms of the intellect the form of the impressions made upon the musical imagination—in short, to hold the mirror up to Music. It is hoped that those who have themselves the intuitive knowledge will recognise the likeness.

The following up of rhythmic principles introduces the new proportions of a wider range into musical theory. In the words of one of the most broadminded of our musicians, the late Mr. Alfred Hipkins, "We must forget what is merely European, national, or conventional, and submit the whole of the phenomena to a philosophical as well as a sympathetic consideration,



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such as in this (nineteenth) century is conceded to language, but has not yet found its way to music."

The purpose of this Analysis could not be better stated.

The work is arranged under two main headings, which are a guide to its contents generally rather than exact divisions of the subject. Necessarily it contains much that is already familiar to experienced musicians. The object has been not so much to discover new facts, as to present the relations of those already known in an intelligible order. For this purpose complete definition of technical detail, however elementary, is indispensable; but it has not seemed desirable to proceed by precept rather than by argument after the manner of a text-book. Such a style proves impracticable where first principles have to be expounded and established, particularly in the present transitional conditions of musical thought. So much do the new and the old now mingle together that controversial matter, though purposely reduced to the smallest possible limit, cannot be altogether excluded. Therefore the ordinary text-book manner would convey a false impression.

There is also a deeper reason. Whatever be the style of its expression, art should surely be taught as art, and not as pseudo-science. We deal with facts, not as an end in themselves, but as a means to an end. The end to be held in view is the explanation of artistic technique as the outward form of human expression, not as a thing to be pursued for its own sake.

In treating the musicians for whom the work is intended merely as wholesale consumers of ordered

facts, this end would have been defeated. The Analysis is not planned to act as a mechanical guide to music, nor to cram students for examination. It will make no one the wiser unless assimilated by means of thought. It aims at pointing out the lines upon which analytical study may profitably proceed, and thus at inciting others to think and study for themselves. It is by stimulating the exercise of the reasoning powers upon musical matters hitherto largely ignored or taken for granted that one may hope to hasten the artistic revival in music, signs of which are already beginning to appear.

Many of us are no longer satisfied with the methods of our fathers; we perceive the inadequacy of narrow musical judgments founded solely upon technique; we desire to become artists rather than well-informed mechanics; we are seeking in all directions for an intelligible basis of music that will afford foundation for breadth and independence of artistic criticism. Old-fashioned dogmatism will presently be fighting for its life or ceasing to exist. Nature demands survival of the fittest.

I wish here to make full acknowledgment of the immense advantage it has been to me to discuss all the points of this theory with so able and experienced a musician as my friend Dr. T. H. Yorke Trotter, to whom I am deeply indebted for many valuable suggestions. It is also due to his indefatigable exertions that upon its educational side this is no longer a theory in the air. I am able to state that for some time classes have been held for the purpose of instructing teachers upon the lines laid down in this Analysis.

Text-books for the use of teachers, elementary and advanced, are being prepared by Dr. Yorke Trotter and under his supervision, and will shortly be issued.

The principles of Hindu music have become known to me through study of the works of the Raja Sir Sourindro Mohun Tagore, Mus. D., and from some notes very kindly supplied to me by his son, Kumar Siva Kumar Tagore. To the same source I am indebted for my examples of Hindu music.

The material of my "Analysis of Time-outline in English Folk-song" I owe to the courtesy of Mr. Cecil Sharp, who generously placed at my disposal a large number of tunes from his collection. I am thus enabled to present this new aspect of melody under most interesting conditions.

For permission to quote other melodies and transcriptions which appear in the Appendix, I desire to express my thanks to Baron Kraus Figlio, Lieutenant-Colonel Mockler-Ferryman, Miss Lucy Broadwood, the Reverend F. W. Galpin, Mr. Frank Kidson, Messrs. Novello & Co., and Messrs. Kegan Paul, Trench, Trübner & Co.

M. H. G.

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# INTRODUCTION

THE form of music is more complex than that of any other art. He who looks for simplicity in its analysis is doomed to disappointment. But this should not deter the musician from the endeavour to understand his art.

It is sometimes said that music is too elusive an art to be analysed to any purpose. To which it may be answered that the elusiveness of musical effect is due, not to an erratic constitution, for no art is more strictly bound by law; neither to lack of organic unity in a composition, for nowhere else will incoherency sooner involve oblivion.

The factors of musical effect can be shown to produce each its own result inevitably; the principles governing the use of these factors are equally unalterable, being inherent in the nature of the art. All this can be certainly known, since it admits of actual demonstration. The elusiveness of music lies elsewhere. It consists in the action of the individual mind upon the form of music, not as destroying that form, but as re-creating it. So much original personality as exists in the mind, exactly so much originality of form will be found in its music. The mind is no less elusive than its creations; could we understand the mystery of personality, we should understand the

mystery of music. It is a mystery that exists in some degree in all the arts, but music offers unique opportunities for the utterance of personality. Instead of a ready-made form, music brings nothing but a few units of construction and natural lines of development, some part of the material and the laws regulating its use, and leaves all the rest to the individual composer. If he have a mind that can stamp its own impress upon music, he will produce in course of time a new style. If not, he will but stumble and imitate the doings of others.

The theory of an abstract musical form in which to train composers is false to the true nature of the art. There exists, in fact, no such thing, except in the minds of those who lack imagination, and wish to be told exactly what they are to do next. There are always plenty who are ready to live by the telling, and so the tradition survives, and the real art of music is not taught at all. What is taught instead is the mathematical method of composition, the distribution of tones in a certain order that has been calculated to produce the desired effect. Any one of average intelligence and who is not tone-deaf can learn this, and so it cannot but be said that its object within certain limits is commonly realised. But when the thing is done, who is thereby the better? Would not any one prefer to hear something original and sincere, however simple, than the cleverest imitation? Are we likely to attain greatness in art, or in any other department of life, by remaining a nation of imitators?

The cumbrous machinery which this method involves resembles nothing so much as the elaborate stone aqueducts of the Roman days, which are entirely superseded by the simple discovery that water finds its own level. In the same way the intuitive rhythmic feeling of music, unless suppressed, finds its own outlet. Unfortunately, the conditions of modern life are all in favour of suppression, and therefore, if we wish for originality in music, we must reverse the present conditions of education, particularly of musical education. We must learn to take hold of and develop the natural lever which moves all the rest, the rhythmic feeling. It is a fact that this natural motive power can be awakened even in any average town-bred child with astonishing results, whereas to the adult the matter is a far more difficult one, except in case of the specially gifted.

Elementary musical education is, therefore, of the highest importance. Develop the natural powers of the mind in the child as you would the muscles of the body, and a strong, healthy individuality will result. Such an individuality is essential to the life of art. Of its importance in national life, it is for the social reformer to speak, yet it must be clear that our existence as a race depends upon our capacity for standing on our own feet, both nationally and individually. It is possible that the musician may be the pioneer of this new educational movement, a movement that regards the mind as a living thing to be fed, rather than a warehouse to be crammed. The musician can testify that analytic

instruction, however important, is not the beginning of knowledge. Rhythmic culture, bringing with it appreciation of music and natural artistic capacity, has existed from the earliest times independently of intellectual knowledge, and is still to be found broadcast amongst those who have received no musical education. If Nature is given her own way, imagination goes before, and as opportunity offers, understanding follows after. Imagination does not grow out of understanding, but understanding out of imagination. The divorce that has long existed between the theory and practice of music is due to antiquated theory that has little or no root in imagination. For these two ought to go hand in hand and assist one another. Theory must be practical or it is valueless, and practice if influenced by false theory will fail of its end. Without theory the musician is prone to become the slave of his own practice, and through lack of correction by practice the theorist degenerates into a pedant. In short, it is impossible to separate the two if either is to be completely taught.

There are some few who can trust absolutely to their own instincts, but it is beyond question that the majority require to be taught. What is even more to the purpose is that they are being taught. We have not only to sow the right seed, but generally to clear the ground before any seed can be sown. The English musician is still in the pre-Darwinian stage. Like those who believed the world to have been created 4004 B.C., he dates his art from the early centuries of

our era, and all time previous to that is a blank to him. Something of the extraordinary mental quickening that has been produced by the wonderful word "evolution" will surely spread into music when it is realised that our art is as old as man himself; that we can push back our origins almost indefinitely; that in consequence the modern horizon widens illimitably; that, at last, we are going out, like Columbus, to discover a new world.

The principle which has already found its way into literature lies ready for application to music. Instead of regarding a text as material for grammatical analysis in the flat, we recognise that all art is a growth, which, if we would understand, we must analyse in all its stages from the bottom upwards. It is by analysis of its evolution that we realise it to be a part of nature; it is not made, but grows, and thus its human character is revealed. All true art is a form of life, an expression of human nature, and cannot be otherwise. "Art," said Montaigne, "is nature seen through a temperament." And since music is the least conventional, the most natural, of all the arts, its elements are as perceptible in the great art work as in the simple melody. Each great genius creates from the elements and moulds the plastic material to his own will. If we grasp these elements and the trend of the evolution, we shall know what has gone before, and where we stand in relation to the past and to the future.

It is not claimed that such analysis represents the whole of musical education. We require, besides, to read and write music easily, and to have some acquaintance with the method of its production by voice and

instruments, the knowledge of instruments, and performance upon them. In a general way this may be summed up as notation and tone-production. It is not the object of the present volume directly to teach these subjects. They pertain more especially to the practice of music, and form ground that belongs to oral teaching. Notation and tone-production must enter to some extent into any technical account of music, but facility in them can only be gained in practice. The educational need of the day is for a truthful intellectual presentment of the growth of musical form. For this materials do exist, but they have lain for the most part unused. Musicians have quietly accepted the theory of mediæval origin, oblivious to the monstrous impossibility of developing the natural out of the artificial; and so the practice of the composers of music is almost wholly at variance with the theory of it as taught in the schools. Of the analysis of the natural art there are but fragments. Melody is ignored, harmony is made foolish by isolation, "thematic development" is a vague muddle, and strict counterpoint burdens the mind with the lumber of the Middle Ages. But when the complete development unfolds itself, the fragments we have hitherto known fall into their right places, the dry bones come together and grow into a recognisable whole, the rhythmic conception justifies itself by its unity. It is not this intellectual conception that is going to originate music, but it can assist to carve out channels for the real motive power, instead of damming it back. It will do this by finding the intellectual truth of music, which means freedom to the

imagination, whereas intellectual falsehood cramps and chokes it. And a narrow doctrine taught dogmatically is inevitably false.

Therefore we must prove all things, but above all see to it that our rhythmic feeling and our imaginative hearing take the lead, else we shall put the cart before the horse and repeat the old mistake. We can show the evolution of music in the past, but it is imagination that will find the road of the future. And the musical imagination is "rhythmitonal"—it does not exist apart from rhythm. A rhythmically uncultured nation cannot be actually "musical," whatever may be its potential capacity for music. For this reason a musically gifted people will always be found to have associated dancing with its music, for dancing is an even greater stimulant of rhythmic feeling than is music, especially with the young. It may be said that no national music can long exist without national dance, and it is evident that the Puritan movement in England, by killing the dance, dealt a heavy blow at the national music. Vulgarity in music is invariably a sign of rhythmic degeneration, and to this cause must be assigned the present condition of English popular music.

In the sixteenth century English music was in the forefront of the nations. This was the first great conventional era of the art, but no independent development on natural lines has ever taken place in England. *It is yet to come.*

What we have to do in order to bring this about is to leave off the external acquisition of technique, foreign or otherwise, as an end in itself, and cultivate

in ourselves and in our children the love of sincere and spontaneous musical utterance. Our own indigenous folk-art should form the backbone of elementary education, for all natural musical development springs out of national dance-songs. The spirit of folk-song is the true art-spirit which asserts itself against the soul-destroying bondage of custom and routine, that has done so much to thwart and hold up the natural currents of musical inspiration. We shall do well to claim our national heritage, and admit the music of the folk to a recognised place of its own in the world of art. The study of evolution discloses the steps leading from folk-song up into the higher walks of music. Between the art of musicians and that of the folk there exists the difference of the lettered and the unlettered, of the adult and the child, of the individual rather than the communal; this is a distinction of form, but not of essence. Both cultivated and wild flower are forms of life, whereas the essential distinction is to be drawn between the flower and the imitation flower, which is not a form of life. That so much of the spurious article exists in music as to cause it to stand in the minds of some people for the original, is an unfortunate occurrence due to a lack of the ear that hears. It is the ear and the spirit that need to be roused. And so long has our folk-song been neglected, that it is necessary to set the imagination upon this road of the past in order that it may have a clear lead. It is the atmosphere of folk-music that needs to be restored, and this can only be effected by teaching in the schools, since song and dance have died out in

the home. It is not a question of a cursory glance through such music, but a thorough familiarity with it—a storing of it up in the memory, for only in this way can its charm be felt. And if English folk-music have ceased to charm the Englishman, though he have all knowledge and make music to the end of time, it will be but as empty sound and waste paper, since he is persistently ignoring the law of nature which decrees that, because sincerity is the first requirement, only through the gateway of national character can art attain to the expression of the universal.

# ANALYSIS OF THE EVOLUTION OF MUSICAL FORM

## PART I

### TONE-MATERIAL

## CHAPTER I

### GENERAL MATERIAL

Definition of tone—Definition of the outlines—Time—Pitch—Force—Colour—The chromatic scale—Absolute pitch.

A TONE is a sound of definite duration, pitch, intensity, and quality. It can vary in these four respects, and its variations are the formal material of music. When a tone varies in duration, or "time," it is longer or shorter; in pitch, it is higher or lower; in intensity, or "force," it is louder or softer; its quality, or "colour," is that which distinguishes one kind of voice or instrument from another.

Tones in succession produce a movement in time, which is invariably of a rhythmic nature. This movement is called an "outline." Time-outline, pitch-outline, force-outline, and colour-outline are the names for a succession of tones in duration, pitch, force, and colour respectively.

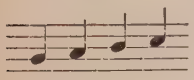
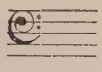
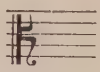
Tone-movement is a general term expressing the combination of the various outlines.

The character of general rhythmic movement in music is that of hastening and slackening in time, of rise and fall in pitch, of swelling and lessening in force. To these outlines colour is an accessary.

The material of time-outline consists of all possible gradations from slow to fast, and its rhythmic movement varies therefore in speed. Speed in music is called tempo. Tempo is indicated in notation in a general way by an Italian term for speed, allegro, andante, &c., or else it is determined precisely by metronome, in which the movement of a pendulum can be arranged to give the speed required. There are in notation no exact indications of the divisions of tempo. A varying tempo is indicated by the following terms: accelerando and stringendo for gradual increase of speed; rallentando, ritardando, and ritenuto for gradual decrease of speed.

The material of pitch-outline, by nature consisting of all possible gradations of pitch, has been transformed by art into a series of fixed and named degrees that exclude all intermediate gradations. These degrees form the material of pitch-outline. Divisions of pitch are called intervals, and the interval from one degree to the next is a semitone (*i.e.* half a full-tone), representing the smallest division of pitch practicable upon most instruments. Quarter-tones and third-tones can be sung by the voice, and played upon instruments of the violin family, and they form the basis of Eastern music, but they are not recognised in the European art and have

no place in its notation. The material of our pitch-outline thus consists of semitonal divisions ranging from high to low, and these fall necessarily into the natural division of the octave which occurs at the twelfth semitone. At this point the name, and virtually the pitch also, of a tone repeats itself, and thus the octave is the largest interval composed of differing tones. The whole pitch-material available for music extends over about seven or eight octaves, each of which is an echo of the others at a different level of pitch. Hence pitch-outline has two general variations: firstly, of rhythmic movement, direction upward or downward; secondly, of position, higher or lower according to the octave chosen. These two variations are indicated in notation by the stave and notes

 and by clefs  

The direction of an outline is thus reproduced to the eye by the rise or fall of notes upon the stave, and the position is indicated by the clef.

The material of force-outline consists of all possible gradations from soft to loud, and its rhythmic movement varies therefore in intensity. This is indicated by the words fortissimo, forte, mezzo-forte, mezzo-piano, piano, and pianissimo, each of which indications lasts until contradicted by another. They are usually written as follows: *fff*, *ff*, *f*, *mf*, *mp*, *p*, *pp*, *ppp*, representing the whole range of material from loud to soft. Varying force-outline is indicated by the words crescendo and diminuendo for increase and decrease, or the sign < >

The material of colour-outline consists of the voice in its four recognised qualities, treble or soprano, alto, tenor, and bass, and all the instruments used in music. These are divided in a general way into strings, wind, and percussion instruments. Stringed instruments are divided into keyboard, bowed, and plucked instruments; wind instruments into keyboard, wood, and brass instruments; percussion, into instruments giving one or more tones of definite pitch, and those of indefinite pitch. With a single instrument the colour-outline is necessarily unvaried; any number of instruments can be combined from two up to a full orchestra, and united with voices. This is the largest multisonant combination, employing practically the full resources of colour. The combinations of colour-outline in notation are called a score; vocal score, quartet score, orchestral or full score, &c., of which the separate notation of any single voice or instrument is called a part.

It will now be seen that pitch-outline differs from the other outlines in possessing a punctuated material, which prevents the smooth, unbroken passage from one extreme to the other that takes place in time-outline and force-outline. In pitch-outline we proceed not by a gradient, but by steps. This movement by steps is called a scale, and the semitonal divisions of pitch have received the name of "chromatic scale."

The term "absolute pitch" is synonymous with *actual* pitch; by this term is not meant that any part of music has an independent existence apart from the rest, nor that pitch is more absolute in itself than the other outlines. The real significance of the word lies in

the fact that in two of these outlines, those of time and pitch, the material has been subjected to a selective process, by which means a new and definite set of rhythmic relations has been established, forming the standards of the art. These special relations do not exist in the general material, which is therefore by distinction called absolute. The term applies more suitably to time-outline, because in gradual transitions of speed it is difficult to discover definite relations, whereas in pitch-outline the relation of the semi-tone cannot be overlooked. In force and colour no standard of relative selection exists, therefore in their case the term absolute is not required.

What is known as the perception of absolute pitch is the recognition of a particular degree of pitch by name. It appears to be an immediate intuitive association of name with tone, each degree appearing a distinct entity. It is not, as has been stated, merely the power of imitating correctly a musical sound without reference to its name.

The pitch of each degree should be fixed at a given number of vibrations. The exact relation of one degree to another is determined by the system of tuning known as equal temperament (the division of the octave into twelve equal parts), and since the adoption of this system, which became general during the course of the last century, no variation exists in the relations of the degrees. But unfortunately there are still variations in the absolute pitch of the degrees as a whole, which cause great inconvenience, though they do not affect the system of musical notation; c″

is still c″, while its vibration number may vary from 514 to 536 or higher. It is obvious that the difficulty of recognising any given degree by name from the sound only, is enormously increased when that degree is itself subject to variation, and it is highly desirable that such variations should disappear and a fixed pitch be generally adopted.

# CHAPTER II

## THE SIMPLE STANDARD OF TIME AND ITS NOTATION

The principle of time-division—The time-beat—Divisions of the beat—Evolution of values—The notes.

THE relative selections of time and pitch have now to be considered.

The selection out of the general time-material is made upon the simple principle of equal time-division. This is the principle of pulsative rhythmic movement, the rhythm of the recurring beat. It is a rhythmic principle of universal application, and is to be found underlying all music, ancient or modern, primitive or cultured, Eastern or Western. This fact is a proof, if proof were needed, of its essential nature.

Capacity for music in the primitive sense is summed up not in an "ear" for pitch, but in the ability to repeat a blow upon any resisting surface at precisely regular intervals; in other words, to keep time. This necessity will be appreciated by teachers of music who have met with pupils impervious to all attempts to drill them into the required precision. Such a condition is unheard of in the savage world, where existence actually depends upon accurate concerted action. The perception of the exact moment at which the blow is to be repeated is an intuitive perception, a repetition so obvious that it takes

place in the mind almost sub-consciously. It is entirely natural. When children are trained young upon natural rhythmic principles, not the slightest difficulty do they experience in keeping time accurately. The repetition continues easily in the mind through sound and silence, and if liable to be upset by silences it can be assisted by counting, which is an intellectual process. At the same time it is not necessarily dependent upon any such extraneous support.

This exact unit of recurrence is called the time-beat. It forms the simple standard of time, and is the only standard of music that is of universal application. It is in truth the *sine quâ non* of music. Without it no concerted music has ever existed or could exist, for if the sense of the beat be lost, instantly the clue is gone. There is no longer music, but a chaos in the mind of him who fails to grasp the beat.

It is doubtless due to this cause that the beat is a prominent audible feature of primitive music. It is made upon a gong or drum, or with a stick upon the ground, struck by the feet upon a board, or clapped by the hands. In a later stage of development, when there is (or should be) no fear of the beat being missed, a noisy time-beat becomes a superfluity, and these manifestations drop out of cultured music. In the modern orchestra the beat is made evident to the eye of the players by the movement of the conductor's bâton, which replaces the primitive appeal to the ear, but is now more used to give an individual "reading," than to enforce a precise repetition.

From the practical point of view, in performance of music, no musician can possibly ignore the beat,

and yet the standard it represents has been ignored to a great extent intellectually. The time-notation of music proceeds frequently regardless of it, a neglect that has led to much superfluous complication in the record, as will subsequently be shown.

The only variation that takes place in the beat is that of pace, or tempo. It can occur at quicker or at slower intervals, and the emotional character of any music depends greatly upon the pace of the beat, by which the tempo is decided.

The desire for variation introduces divisions and sub-divisions of the beat, on the one hand, and causes its unit of time to be doubled or quadrupled in length, on the other. Thus an unequal time-movement enters in, the beat still continuing with a time-outline differing from it, and yet constantly in relation with it. Unless the time-outline proceeds uniformly in the same equal division as the beat, the outline and the beat are distinct from one another. The principle of equal division still prevails, but it is carried further in the outline. Several divisions are recognised, each one halving the time of the one preceding it, and these time-divisions are called "values." The beat becomes the standard value.

Each value is divisible into three parts as well as into halves. When the beat is in three-part division, and this is carried on throughout, it is a "ternal" beat. This forms a variation upon the two-part division, which is a "dual" beat.[1] Frequently the two divisions are employed in succession, but one usually predominates and gives its name to the beat. In primitive music

[1] The words simple and compound which are in use, are misleading, since they convey no idea of the divisions of the beat.

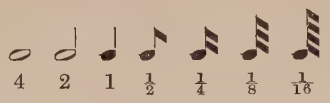
both these divisions are in constant use. The most primitive peoples have not only grasped their time standard unerringly, but have advanced to a very considerable amount of variation upon it. They appreciate the values of time-outline apart from the beat, and their music compares most favourably in this respect with the best folk-songs of Europe.

In consequence of this very early development of time-outline, it is quite impossible to trace the evolution of musical values in detail. They are all frequently present in the most primitive specimens, and there is nothing to indicate with any certainty that one is older than another. Doubtless the values nearest related to the beat were the first to be grasped, and equal values must have been appreciated before unequal ones, but beyond this there is little to be said. The knowledgeable evolution of tone-material in primitive examples begins with the later form of pitch which is found in a very elementary stage.

We may draw from these facts a definite conclusion as to the relative positions of time and pitch in the evolutionary order. Time-outline has a natural priority and leads to the development of pitch. This is the order to be observed in musical education. It is not necessary or desirable to teach all the intricacies of time-outline first, and then proceed to pitch, but capacity for reading at sight and writing from dictation in time-outline should always be a little ahead of what can be done in pitch-outline. This will ensure rapid progress.

Values are called notes[1] in musical notation. The

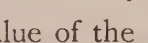
[1] The term "note" is commonly used as a synonym for "tone," as well as for the written character.

notes are written, and their relative values can be stated in figures as follows :— 


The notes are named respectively semibreve, minim, crotchet, quaver, semiquaver, demisemiquaver, and half-demisemiquaver. The time-beat should be the crotchet value. Ternal time requires to be specially indicated, a dot placed after the note being used for the purpose :—

The following signs, called rests, &c., are equivalent to the notes, and are used to indicate the value of any spaces of silence that occur in the course of the tone-movement. The dotted rest also equals the dotted note.

The divisions of time which the notes represent are the easiest that can be grasped by the ear, being all equal divisions, and thus are the foundation of the time-record.

Any of the notes can be combined by means of the tie  when the value of the tone is represented by the sum of the notes thus combined. For convenience of notation a dot after a note is used instead of the tied note, when the latter is next in order to it, that is of half its value. A second dot represents the note one more degree removed, that is of a quarter the value of the note written : This use of the dot is distinct from the dot indicating a change of divisory value ; the latter does not necessarily add to the value of the note, since a dotted crotchet may be equivalent to an undotted crotchet.

# CHAPTER III

## THE COMPOUND STANDARD OF TIME AND ITS NOTATION

Origin of the grouping of beats—The accented beat—Evolution of the accentual standard—The bar in notation—The beat in notation—The time-signature—Change of time—Causes of incorrect barring.

EXPERIMENTS made upon many persons show that whenever a series of equal beats similar to the time-beat of music is presented to the ear, the mind refuses to accept the monotony of the continued equal repetition, and proceeds to arrange these beats intuitively into groups of two, three, four, or more. The exact arrangement varies slightly with the individual, and the greater the speed, the larger will be the group, but the *fact* of grouping is always present. The series is heard imaginatively as a succession of groups, instead of a single series as actually presented.[1]

It may therefore be taken for granted that to this intuitive rhythmic process is due the grouping of beats in music. There can be no doubt that the instinct for grouping beats is as old as music, and that it is as entirely natural as the perception of the beat itself.

We are all familiar with the vertical divisions in musical notation called the bar-lines, between which are enclosed a fixed number of beats, representing what is

[1] Scripture, "New Psychology," pp. 178–9.

generally called the "bar," or occasionally "measure." Here the number of beats chosen to form a group can vary, but whatever number is chosen will continue until a change of time is made. This involves no change necessarily of the pace of the beat, but only of the number of beats in a group. Primitive music when noted falls naturally into bars, and this is due to its natural grouping of beats. The group of two, three, or four beats is the easiest to apprehend, but primitive music is by no means confined to these. Its developed feeling for rhythm is shown both by changes of time and also by bars of five or seven beats, groupings which until recent years were looked upon as impossibilities in cultured music.

It seems to be frequently overlooked that the bar is not a thing in itself but a sign which indicates the thing. We do not hear the bar-line, but what we do hear is a variation of force that indicates the time-beat grouping. The beats are not all equal, but divide into strong and weak. There is the alternation of one louder and one softer sound, or of one louder and several softer, and this difference in force between the sounds is called accent. Force-outline, which is otherwise free, having no standard of its own, is made relative to time-outline, and in accent assumes a pulsative habit. The primitive bar consists of the simple alternation of two beats, accented and unaccented, or of one accented and two unaccented, the group of three beats. It is a natural condition of alternation that the accent is made on the first beat, and if one asks why the first and not the second of two, the answer appears

to be that when we alternate, the weak beat is made the alternation of the strong one, and that we do not alternate a lesser factor by a greater. The evolution of the bar is that of greater length and consequent addition of varying degrees of accent for the purpose of its articulation. The strongest accent is invariably upon the first beat, and the bar now becomes the space between the main accents, with subsidiary accents to assist its grouping. The beat-division into dual or ternal does not affect the system of accent, but if subdivisions of the beat are used in melody, additional accents may have to be made, since the larger the number of notes in a given beat, the more difficult does it become to grasp their relative values.

"Time" in music thus consists, firstly, of the recurring beat, the simple standard; secondly, of the recurring accent, or arrangement of accents, the compound standard. This may be called the standard of strict accent or of the bar. So essential is it to pulsative rhythm, that upon instruments not admitting of it, such as the organ, harmonium, and early keyboard instruments, no great development of time-outline can take place, because the standard of the bar disappears in performance through lack of accent.[1] Such accentless music tends thus to develop in the direction of pitch rather than in that of time, its time-outline remaining undeveloped. On the other hand, the evolution of the orchestra has tended towards the enforcement of accent and therefore to the develop-

[1] It is possible to produce a slight feeling of accent by dwelling on a note, but this is rather for occasional than normal use.

ment of rhythmitonal art. For this purpose its percussive character is largely used, consisting of the class of drums, gongs, cymbals, and all instruments emitting mere noise.

The bar is sometimes supposed to date only some three centuries back, because it is not to be found earlier in European notation. This short-sighted notion is due to a misconception of the history of notation. Though to some extent the growth of our music corresponds with the growth of its notation, such correspondence is limited to a comparatively recent period. The early stages of rhythmitonal evolution were unrecorded; no one attempted to express tone-relations in words or notes, because such a thing was entirely unconsidered. As is well known, the early stages of European notation belong to the church-system, and were therefore the work of monks to whom the popular music was a forbidden thing. Notation as we know it dates from the seventeenth century, and nothing is more significant of the change that came over our music during its transition period from church-style to folk-style than the sweeping and drastic changes undergone by its notation, in order to make this a possible record of rhythmitonal art. The appearance of the bar and indeed of all the familiar features of modern notation coincides with the disappearance of the church-system. We may take it, therefore, that the standard of the accented beat represented by the bar was missing from the church-song, and that had folk-music possessed a notation earlier, the bar would have appeared in it.

It is unfortunate that the natural clearness of our

method of accentual grouping is obscured by the confusion of its notation. As has been pointed out, this proceeds on its way apparently ignoring the fact that any standard value of time exists. The bar-contents when added together make the right whole, but nothing exists to show with certainty the relation of these to the beat. Thus arises confusion between the beat-division and the group of beats. When a beat-division is taken at too slow a pace to be recognised as such, it becomes a group of beats, normally defined by an accent. The point of change from beat-division to group is distinct to the ear, and should be clearly distinguished in notation. The beat is the standard value, yet there is no standard note to represent it—minim, crotchet, quaver, and even semiquaver being employed indifferently. Thus three or four complete sets of relative values have to be used where one is all that is required. Nothing is ever gained by the use of promiscuous notation for the beat; it is merely a bad habit on the part of composers. The use of differing notes does not convey the tempo of the beat; on the contrary, a minim is more often used for quick tempo, and a quaver for slow tempo. As the beat can vary only in absolute duration (or tempo) this variation in the sign which records relative duration (the note) can serve no practical purpose. If the crotchet were adopted as the standard note of the beat, the same results would be attained with less than one-third of the present complication. The indication of the beat and bar in the sign called the time-signature could then be made clear and simple.

At present the time-signature consists of two figures, of which the upper relates to the number of notes in the bar, and the lower to the value of that note, which may or may not be the beat. Thus the signature indicates length of bar, and the value in notation (1) of the beat, or (2) of a division of the beat, or (3) of the sum of two beats.

1. In slow or medium tempo, the signature indicates the value of the beat.

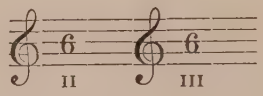
2. In fast tempo the signature indicates frequently not the beat but a fraction of the beat, and its value and number. Thus $\frac{6}{8}$ in slow tempo means six beats of quaver value, and in fast tempo it means six divisions of two beats, each of the value of a dotted crotchet. This ambiguity is sometimes removed by placing a note showing the value of the beat over the signature.

3. In very slow tempo, the signature indicates the value of two beats. Ex. $\frac{3}{4}$ Adagio = 6 quaver beats.

Further complication is caused by the use of the signs C and ₵, C being equivalent to $\frac{4}{4}$ and ₵ to $\frac{2}{1}$ or $\frac{2}{2}$ or $\frac{4}{2}$.

This condition of the time-signatures is due to the lack of accurate time-beat notation, the relative nature of the signature not being distinctly indicated. If the crotchet were adopted as the standard note of the beat, all ambiguity in the signature would disappear, and the signature itself would only have to indicate the number of beats in the bar, and the manner of their division. It could then be reduced to one figure, *i.e.*, 1 2 3 4 5 6 7, &c., when the beat is dual (in

2 quavers), and with the addition of a dot, to 1. 2. 3. 4. 5. 6. 7. when the beat is ternal (in 3 quavers). Six beats to a bar would admit, like five and seven, of two forms of accent ˆ|||ˆ|| or ˆ||ˆ||ˆ| and should be distinguished thus—




Change of time involves alteration either of the bar or of the beat-division, or of both. The first concerns the position of the strict accent, the second changes the beat-division from dual to ternal, or *vice-versa.*

Owing to the present state of the time-signatures a complete change of signature does not always indicate change of bar or accent. In the following example, $\frac{2}{4}$ to $\frac{6}{8}$ (♩. = ♩), the bar consists of two beats and there is no change in it. The beat changes from dual to ternal. With the suggested revised signature this would be written 2 to 2. (dotted). Thus the alteration of the bar is indicated by change of figure, and change of beat-division by the addition of a dot.

The following examples show change of accent with and without change of beat-division :—

| | | | |
|---|---|---|---|
| Present signature : | $\frac{2}{4}$ to $\frac{3}{4}$ | $\frac{2}{8}$ to $\frac{3}{8}$ | $\frac{2}{4}$ to $\frac{9}{8}$ |
| Suggested signature : | 2 to 3 | 2 to 3 | 2 to 3. (dotted). |

The quavers of the second example would be written as crotchets, without affecting the tempo of the music.

It must be clearly stated that, unless music is incorrectly barred, the strict accent is the division of the bar only and never of any larger unit. The imperfect record of strict accent in the music of the earlier masters has already been pointed out,[1] for there are instances in the works of Beethoven, Schubert, and others of movements where it is frequently obvious from the character of the music that the accent does not fall on every bar. But neither does it fall on every *alternate* bar, as a well-known and widely-spread modern theory would have us believe. It would be difficult to discover a single movement where such an alternating accent could be applied all through without making nonsense of the music. And if this could be done, it would render the theory superfluous, since it is clear that there can be no possible difference (except in the notation) between two bars accented and unaccented and one bar of twice their length, *i.e.* $\frac{4}{4}$ for $\frac{2}{4}$, $\frac{12}{8}$ for $\frac{6}{8}$, &c. But as this rarely occurs, the theory is not merely a superfluity, but an actual misrepresentation of the practice of the great composers. The true explanation is to be found in the fact that there was in their time no definite custom of strict accent on the bar-line, with the result that the position of this accent was not indicated at all, but was left to the intuition of the executive artist, and consequently that the bar-line then signified nothing to the ear, but was merely placed as a matter of convenience to the eye in reading. The great composers, far from desiring that uniformity with which

[1] Macpherson, "Form in Music," p. 42.

modern theory has credited them, were given to requiring considerable variety in the arrangement of their accents, and to represent these changes faithfully would have meant a complication of barring quite beyond the understanding of that day. They took advantage, therefore, of the vagueness then prevalent. It was simpler to use a smaller unit for the bar which could be retained throughout the movement, while the real bar-unit (the recurring accent) with its manifold changes was not indicated at all. The misfortune to posterity of such an omission is that none but the composer could know for an absolute certainty what he intended, and that, therefore, these classics are subject to as many different modes of accents as there are readings, and strict accent is still commonly considered to be a question of performance rather than of notation. Yet clearly the bar-line is the natural and suitable method of indicating it, since the ordinary signs of accent (*sf* or >) must be kept for the irregular use, or for the occasional additional emphasis required upon an already accented beat. And if the bar-line does not convey the position of the accent, it can have no musical significance whatever, and merely leads to purposeless complication.

# CHAPTER IV

## RELATIVE PITCH AND ITS NOTATION

Material of pitch—Dependence of notation on the scale—Definitions of the scale—Analysis of the diatonic scale—Its minor mode—Its intervals and inversions—Definitions of melodic key, key-circle, and tonality—Notation of pitch a compromise—Causes of its complication—Eastern notation—Relation of tuning of orchestral instruments to notation.

However desirable it may appear to describe the element of pitch in the natural order of development, such a course is practically neither convenient nor altogether possible.

From the point of view of evolution it is probable that what we have named the relative selection of pitch was made first out of the natural material in the same way as the time-selection was chosen, and that the complete absolute scale of semitones either existed independently or was a much later discovery. But to us, accustomed from childhood to regard these semitonal steps as the material of our pitch-outline, it is far easier to understand a selection made from this, than out of a nebulous pitch-matter apt to suggest howls or cat-calls rather than a material of music.

Having taken one step in the face of evolution, when we turn to consider the selected material of relative pitch, a further difficulty presents itself. It is impossible to analyse music apart from its record in notation, but of

the early stages of our music notation offers no trace. The first impress of the folk-style on record is that of a fully-founded system, a well-established scale-form. This scale is the result of ages of practical experiment in melodic types, of which it represents survival of the fittest. The fact that all scales owe their origin to melody would scarcely need stating were it not for the current idea that scales are a ready-made material used in the manufacture of music. As most elementary teaching proceeds on this assumption, it is necessary to point out the fallacy involved. In music, and indeed in all art, the standard comes into general use long before it is recognised as a fixed thing and made the basis of a system; the use is first, the system is second. And the standard grows out of things small in their beginnings. Thus, though it is inevitable that some lesser amount of tone-material was in existence before the scale, we have no words or signs to express the relations of these primitive tones but those which have arisen out of and therefore imply the pre-existence of the complete scale. No student of early music can ignore the fact that the common chord or triad is a far more primitive set of relations than the diatonic scale, and the most primitive of all is the third out of which the chord arises, but the actual word "third" is unintelligible except as the distance between three adjacent degrees of the scale. The whole of our interval nomenclature is founded upon this scale; it is the standard by which all successive divisions of pitch are measured, named, and written. Its definition, therefore, supplies the key to the terms needful for the explanation of relative pitch.

The word scale is derived from the Latin *scala*, a staircase or ladder.

It is not an easy matter to define the general nature of a scale, as will appear from the character of the following statements concerning it by well-known writers.

1. "A term denoting the series of sounds used in musical compositions." (Grove's "Dictionary.")

2. "Successions of steps forming ladders." (Niecks, "Dictionary of Musical Terms.")

3. "A series of notes which stand in some recognisable relation to one another in respect of pitch." (Sir H. Parry, "Art of Music.")

4. "A key, or scale." (Ritter, "History of Music.")

5. "The most natural model for the formation of tonal successions is found in the seven degrees of sound which also form the basis of our whole tonal system." (Marx, "School of Composition.")

6. "The series in which the ascending motion of a sound in itself undetermined meets on its way the intervals of the key and by them is determined into degrees." (Hauptmann, "Harmony and Metre.")

7. "The scale appears as chord of the tonic with passing-notes." (Riemann, "Dictionary of Music.")

Of these, Nos. 1, 2, and 3 would apply equally to chord-form (in arpeggio); Nos. 4 and 5 describe the scale as the key, No. 6 defines it as something distinct which is determined by the key, No. 7 as a chord-form with passing-notes. It will be seen that the last four definitions can apply only to that form of scale known as diatonic; the chromatic scale is certainly neither a

key, nor determined by the key, neither can it be a chord with passing-notes. These statements appear either too comprehensive or else not comprehensive enough. A simple working definition might run as follows: the name-order in pitch of musical tones. A succession of tones is not a complete scale unless it occurs in the name-order of pitch, and every succession in this order is a scale whatever its intervals may be. This defines the scale without attempting to account for it, while the writers above quoted all attempt to account for it on grounds theoretical or practical, philosophical or acoustical, without clearly defining it. The lack of the evolutionary idea is apparent in these statements, and it is impossible to account satisfactorily for the nature of scales without a knowledge of their evolution.

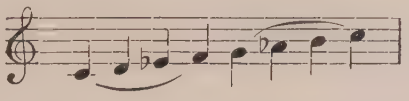
The relations of the degrees of the scale to one another form what is known as the "mode" of the scale, depending upon the arrangement of its intervals. These intervals are reckoned upwards, unless the contrary is expressed. Degrees next one another lie at the interval of a second; of a third if one degree is missed, of a fourth if two are missed, and so on up to the octave. Intervals beyond the octave are similar to those within it; the ninth, tenth, and eleventh, &c., correspond to the second, third, and fourth respectively. The normal intervals of the diatonic scale are major or minor, or if not admitting of this variation are called perfect. Major intervals contain one semitone more than the corresponding minor. Seconds, thirds, sixths, and sevenths are major and minor, fourths and fifths and octaves are perfect. The major second is synonymous with the

full-tone, the minor second with the semitone. The inversion of an interval consists in raising its lowest degree an octave higher, so that the upper degree becomes the lower.

The first degree of the scale with its octaves is the most important, and is called the tonic or key-note. The distance from one degree to the next is variable, being either a full-tone or a semitone. This variation divides the scale naturally into halves, each consisting of two full-tones followed by a semitone, with a full-tone between the last degree of the first half and the first degree of the second half.

Each of these is called a tetrachord, a succession of four notes, the second one being an exact repetition of the first, a fifth higher. Such a repetition forms what is known as a sequence, and it is noteworthy that this sequence, combined with the related tones of the common chord, is what gives this scale its peculiarly satisfying character.

The minor diatonic scale, the secondary and contrasting mode, is lacking in most of the prominent features of the major mode.



The only altered degrees are those of the third and sixth, which become a semitone lower ; but this deprives

the scale of its natural third, and of the sequence referred to. Consequently this scale is of a more arbitrary character and has been subject to considerable variation in its sixth and seventh degrees, but the above mode commends itself as the one best suited for harmonic development.

The intervals and inversions of the scale reckoned from the tonic, are as follows :—

THE MAJOR MODE

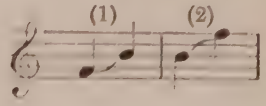
| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Maj. | Maj. | Perf. | Perf. | Maj. | Maj. | |
| Interval . . | 2nd | 3rd | + 4th | 5th | 6th | 7th | + Octave |
| Inversion . . | 7th | 6th | 5th | 4th | 3rd | 2nd | |
| | Min. | Min. | Perf. | Perf. | Min. | Min. | |

THE MINOR MODE

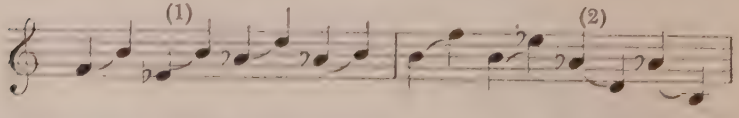
| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Maj. | Min. | Perf. | Perf. | Min. | Maj. | |
| Interval . . | 2nd | + 3rd | 4th | 5th | + 6th | 7th | + Octave |
| Inversion . . | 7th | 6th | 5th | 4th | 3rd | 2nd | |
| | Min. | Maj. | Perf. | Perf. | Maj. | Min. | |

This mark (+) indicates the position of the semitones.

There are two exceptional forms of interval, which occur once between the degrees of the major mode,




and four times in the minor mode,




These are called augmented (1) and diminished (2). Augmented intervals contain one semitone more than

major and perfect, and diminished intervals contain one semitone less than minor or perfect. These intervals are of a peculiarly striking character, and are, therefore, easily distinguished from the normal intervals. They become interchanged by inversion, as do major and minor.

A major or minor scale repeated upon any degree of pitch is called a key. It does not represent the complete possibilities of the key, but forms a melodic type which may stand for it, and can, therefore, be correctly named the melodic key. As a major and a minor key can be formed on every degree of pitch, there are thus twelve of each, corresponding to the twelve semitones of the octave. This forms the key-circle, which in its complete form has been made possible only by equal temperament. The modifications of pitch introduced by this system provide a material that is equally available for use in all keys. Correct acoustic tuning, called just intonation, produces a material that differs with every key. Keys that are the nearest related to one another lie at the interval of a fifth; the scales of these keys have six notes in common, those of two-fifths apart but five notes, and so on. The relations of tones, chords, and keys are summed up in the word "tonality" which means the relations of all tones to a given centre. The simple standard of tonality is the triad formed on the tonic, and the compound standard is the key, melodic and harmonic.

As already observed, the major scale (the melodic key) is also the standard of pitch-notation. But the

notation itself records absolute pitch, the twelve tones of the octave. This requires that every tone shall have its invariable name or sign, distinguishing it from the others. Whereas the relative standard, the scale, uses only seven tones of the octave out of twelve, and requires that these shall relate to one another, and be recognised as a complete succession independently of the remainder. This relation, moreover, requires to be repeated on every degree of pitch.

The result is inevitably a compromise. Neither absolute pitch nor relative pitch is accurately recorded. The absolute names given to the notes are those of the beginning of the alphabet, but instead of twelve names there are only seven, the remaining five degrees having to be distinguished by an affix (sharp or flat) added to one of the seven, as though they had been an afterthought. In order to preserve the necessary standard of relative pitch, these names have to be used more than once for most degrees, so that not alone are there only seven names for twelve degrees, but two of the seven must generally be used for each degree. It is not surprising that under these circumstances much difference of opinion should exist as to what is or is not correct notation, for the actual stave notation records precisely this confusion of ideas. The notes on and between the lines of the stave are the named ones without affix, called naturals, and the affix appears in the form of a sign, ♭, ♭♭, ♯, ×, called an accidental, placed before the note.

The essential character of relative pitch is that while

each key has its own relationship to a given centre, all keys are in themselves equal, that chord-relations are invariable, and the only change can be from key to key, excepting the variation of major to minor. The record of relative pitch in notation, however, gives unfortunately the opposite impression, because it is also trying to record absolute pitch. Of key-relation there is no trace, and every key appears to differ from the others. Thus, although relative pitch governs notation, it cannot be said to fare much better than absolute pitch. There is only one key in which the original names without affix do represent the scale. It might have been expected that A would naturally be its tonic, but C is chosen, so that in the course of this scale A and B have to follow G. Every other key is altered not merely by name, but also by the addition of a signature, that is, the number of sharps or flats necessary to form its scale on the pattern of the scale of C. These being placed after the clef, are understood to affect all notes of these names, without further record in the score. Every key contains a different signature, up to six or seven sharps or flats, and the greater the number, the more complicated does notation become. When six flats or six sharps are reached, there is only one tonic to represent them both, therefore this one key has two entirely distinct forms of notation. Seven sharps are also used instead of five flats to avoid a sudden change from sharps to flats. At the same time, the only true relative variation, that of the minor, is unrecorded in the signature.

All this complication exists solely in the notation

and not in the outline. There is no reason why the key of G♭ should appear more complicated than that of C, its constitution being exactly the same; and there is no reason why C should appear invariably as the standard, since any other key can represent that standard equally well. It is evident, not only that absolute pitch is inadequately recorded, but that relative pitch is actually misrepresented in notation, an entirely false impression of its nature being given. The confusion of the ideas of absolute and relative pitch which commonly exists is, in its turn, due to this confused notation, and also to the form of the keyboard which accords with the notation.

The causes of this strange confusion are mainly these: Firstly, the fact already referred to, that the notation of rhythmitonal music was not a natural growth, but the adaptation of a previously existing system; secondly, the prevalence of a system of tuning called the mean-tone, preceding equal temperament, which for three centuries confined music for the most part to half the keys and to the simpler half of notation, during which period that notation was formed and established; thirdly, the inevitable complication caused by the nature of pitch-relations, and the necessity for fixed degrees of absolute pitch.

In the church-system existed no typical form of scale. Its modes were all composed of similar tone-material corresponding to our scale of C, and only differed in arrangement. One of these modes, the least used, called the Ionian, coincided with the popular scale, and as this mode happened to begin upon C, the

scale of C became the standard scale in notation when adapted to rhythmitonal art, the form of the keyboard also favouring its use. Accidentals were known in church-notation, but merely as accessaries, being used as occasional inflections for the avoidance of melodic difficulties. In rhythmitonal music they were put to their present use of forming the scale upon other tonics than C, and became an essential part of notation. Thus the keys came to branch off on either side of C, in increasing complexity, but until equal temperament became general, and instruments more developed, the full possibilities of the key-circle remained unrealised and notation was a comparatively simple matter. The use of all keys, which in lengthy compositions becomes a necessity, has raised notation to a degree of complexity, which would have not unlikely bewildered the musicians of a century ago. The development of instruments has made the strides required, so that an orchestral score is now of a complexity not only unrivalled but unapproached by any other system of record in art, science, or mathematics.

A notation of either absolute pitch or relative pitch would sweep away the greater part of these difficulties, but neither would be an adequate record of music. The Tonic Sol-fa system is an attempt to record relative pitch accurately, but it is useless except for voices. Attempts to record absolute pitch regardless of relative standards are doomed to failure, since this is to ignore the tonalitive principle of musical structure. Probably the present compromise, in spite of its defects, represents the nearest we can get to

a true record; and even if a more accurate system could be invented, it would be completely lacking in the associations and the historical interest of the one handed down to us. At the same time it is necessary to make clear that the record is an inadequate one, else the true nature of pitch-outline is apt to be overlooked.

In the East notation is in an elementary condition, the stave being unknown. The Hindus, Chinese, and Abyssinians have ancient note-signs, consisting of a kind of letter to which some indication of time is added, but in this respect the Chinese system is wanting, having practically no time-notation. In all probability note-signs also existed in Persia and Arabia, but these do not appear to have survived. The modern Arabic notation is but 300 years old, and is said to have been invented by one Demetrius de Cantemir, who adapted the letters of the Turkish alphabet for the purpose. This is an absolute pitch-notation, with eighteen tones to the octave, and is used in Turkey and other countries of the near East.

The Japanese have a notation for their principal stringed instrument, the *koto*, which records both time and pitch and is about 200 years old. It is on the same principle as the European lute tablature, indicating the string by number, and with marks for the sharps, but there is no stave, and it is read from top to bottom. For stringed instruments with frets and for wind instruments a similar form of notation exists, the number being indicated of the fret to be pressed, or the hole to be stopped. It is said that the *koto* notation was invented by a musician named Yatsubashi, who is

considered to be the father of Japanese national music, as distinguished from its borrowings from China.

The relation of colour-outline to the key-system is due to the circumstances of notation and the practical limitations of instruments, rather than to any inherent property in the natures of pitch and quality. Most modern orchestral instruments can be played in all keys, but their really effective use is generally limited to about half that number. The tuning of these instruments is so arranged that their most effective keys coincide with the simpler half of notation, because this arrangement is obviously the most convenient. Else there is nothing to prevent a violin being tuned in G♯, D♯, &c., which would have its open strings, and therefore its most brilliant effects, in the extreme sharp keys, nor would there be any difficulty in pitching the tube of the bassoon in F♯ instead of F. The result, however, would be to render notation and fingering in all keys a practical impossibility. For this reason the simpler keys of notation are also the easiest for tone-production, and for instruments as well as for notation C major has become practically the standard key. Upon keyboard instruments all keys are equally easy to play in, and here the only difficulty of an extreme key is that of its notation.

# CHAPTER V

## THE SIMPLE STANDARD OF TONALITY

Relation of acoustics to music—The most consonant interval—Intonation of intervals—Artificial theories—Origin of the melodic triad—Elementary tonality and consonance—Physical basis of the harmonic triad—Dissonance—The inversions of the triad.

While the material of time-outline was found to consist of nothing more tangible than beats and arrangements of beats, that of pitch-outline involves a new element with laws of its own, which forms the science known as acoustics. Efforts to explain the pitch-relations of music by means of this science have resulted in failure, for the use of the one cannot be made to square with the laws of the other. This is perfectly natural, for while both start from the same central point, they proceed in diametrically opposite directions. The object of the scientist is analysis, the object of the musician is synthesis. Given the natural triad, the one proceeds to dissect it, the other to create upon it. When the musician turns to analyse his composition he works from it as a whole down to the triad; the scientist ranges from the triad down to the vibrational numbers and other properties of the single tone. These two processes are thus leagues apart, and exist for entirely different purposes. The only point of contact between the two is the triad, upon the value of which both are agreed.

The musician takes it because he likes it; the scientist is able to tell him why he likes it. But when we proceed to the component parts of the triad, a deadlock at once ensues. Consonance, by which the scientist means simplicity in relation of vibrations, points to octaves, fifths, and fourths as the suitable foundation of music. The only European musicians of this mind were they of early mediæval fame, who were unfortunately unaware of their scientific accuracy.

Now it is well known that fifths and fourths have brought more argument into music than all the rest of the intervals put together. Consonance, by which the musician means relations of tones that satisfy his ear, points to the *third* as the fundamental musical interval. Primitive melody constantly rises and falls by thirds; primitive harmony in two parts moves solely in thirds; the harmony of the chord is built up of thirds; the third has always been beloved by the natural ear. We have to deal here with a fact of far greater importance to music than any in the science of acoustics, and if consonance to music means the third, and only in a limited degree the fifth and fourth, while to science it means the fifth and fourth and after that the third, it is clear that two points of view are being named by the same name which are by nature different, and should be recognised as such.

This view of melodic origin is necessarily subversive of the theory which selects the falling fourth or the rising fifth as the most primitive interval. It can easily be shown, however, that such a theory rests upon a radically unsound basis. It is admittedly the

result of a comparative study of scales, and of scales only. The intervals thus selected are those which seem to be common to nearly all known scales. If the scale be regarded as the origin of music, then it would be reasonable to look for the most persistent and indispensable interval within the scale itself, and to regard that as the origin of both the scale and of melody. If, however, we admit that music was before the scale, that the scale implies a previous melodic development,[1] and yet look for the most primitive interval within the scale itself, we are in the position of admitting the origin of the chicken from the egg, and at the same time of proceeding to dismember the chicken in order to discover its origin within itself. Any one is at liberty to judge for himself of the value of the evidence submitted by primitive melody, but not to set aside that evidence in favour of the later witness of the scale. If we cannot discover the origin of music from primitive melody, we shall not find it elsewhere.

It is unfortunate that the question of primitive intervals has been approached hitherto from the point of view of intonation, the exact ratio of the interval. Hence, thirds, it is said, are out of the question as the most primitive interval, because they vary between major and minor, and are sometimes not distinctly one or the other, but a neutral shade between the two. It

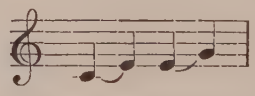
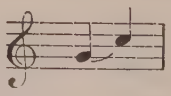
[1] "It is advisable to guard at the outset against the familiar misconception that scales are made first and music afterwards. Scales are made in the process of endeavouring to make music, and continue to be altered and modified, generation after generation." (Sir H. Parry, "The Art of Music," chap. ii.)

would be requiring a little too much of the savage to expect him to conform to our modern idea of equal temperament, but what we should look for is to find if he uses intervals that can be distinguished generically one from another, as thirds from fourths, fifths from sixths. On this point no doubt has ever been expressed. Thirds are thirds, fourths and fifths show no tendency to run into one another, and the major and minor intervals are generally sufficiently distinguished. It is not so much study of exact intonation that is wanted as a knowledge of primitive music viewed in its relation to consonance.

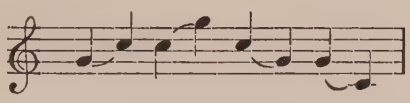
Unfortunately for music the ratios of intervals have always had a fascination for the theoretical intellect. We are all familiar with modern systems of harmony which bid fair to rival in ingenuity the interval controversies of the Middle Ages. The one common character possessed by these theories is their obliviousness of primitive music, and consequent failure to formulate any conception of the evolution of interval and chord. The intellect, working from the theoretical standpoint, has driven the natural practice of music into a corner if not out of sight, whereas the only safe guide for the musician is the experience of the ear and a knowledge of the general practice of both the skilled and the unskilled in music. It is small wonder that harmony is considered amongst pupils an intolerably dry subject, since they have no conception of how it comes to be what it is and are merely presented with rules and a catalogue. To make the theory of pitch-outline of interest to students, we must take

them along the path that man in the past has travelled, so far as we are able to trace it out. It is evident that this road is not the bypath of counterpoint, nor does it even begin with harmony, but with something too simple to have hitherto attracted notice—the consonance of melody.

In order to understand what is meant by this we must divest our minds of the formula of the diatonic scale. This involves the evolution of the melodic key-standard, a fixed type of scale by means of which melody is able to develop itself apart from, and yet in accordance with, harmony. Melody of this kind is a highly organised product and presupposes a long range of development. It is a far cry from the most primitive type to the melody of the average folk-song.

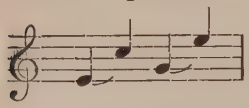
The consonant intuition is a feeling for relative pitch and originates in the perception of the third. The major third is the foundation to which the minor third is added melodically. These are the intervals of the triad, which is the simple standard of rhythmitonal art—  To this the lower third gives its name, because it is the more prominent one. The consonant triad must consist of one major and one minor third, since these agree well together. When the series is continued up to the next octave  the interval of the fourth appears. It represents the gap between the top note of one triad and the bottom note of the

one in the next octave. Since the first tone of the triad, called the root, is its representative tone, this interval of the fourth, taken melodically, has the satisfying effect of return to the essential note. The fifth uses the lowest and highest tones of the triad, omitting the central third, and thus appears of the nature of a skeleton. Melodically it has exactly the opposite effect of the fourth, since it starts from the root and leaps to the note farthest removed from it. When the direction of these intervals is taken downward instead of upward, their effect with regard to the root is reversed, except that the fifth always retains its character of a leap.



This effect is one of great importance, since it supplies us with the earliest indication of the tendency of pitch to gravitate to a centre, which is the essential rhythmic movement of relative pitch; the impression is not a strong one, and naturally it is of an exceedingly limited nature, but it produces distinctly the sense of a recurring centre or point of repose. This centre is invariably called the "tonic," and the second note detaches itself sufficiently to form an independent point on which the mind desires to pause slightly and then move back to the tonic. To the fifth tone has been given the name of "dominant," to signify its independent function apart from its character as fifth tone of the triad. In this function it may be regarded as the door of the tonic.

When all three tones of the triad are used successively this independence of tonic and dominant practically disappears, the two notes being bound together by the third, thus producing the purely consonant effect of a single chord. Nor does the sixth, which represents the leap from the third and fifth tones



suggest any independent character. It is simply the inversion of the third, and as such it is as consonant as the third, and appears an organic part of the triad.

Tonic and dominant are the two tones that produce elementary tonality, the rhythm which involves points of recurring repose. The tonic and its third produce elementary consonance, without which no development of this primitive tonality can take place; the three tones together complete the consonant conception and form the simple tonalitive standard. Whether these intervals of consonance appeared first successively and were afterwards united, or whether they were discovered as harmony and afterwards taken melodically, it is impossible to say. The fact remains that they are sung in both forms by tribes whose general culture resembles that of the Stone Age. A further indisputable fact[1] is that these very consonant intervals form the material of blackbirds' song as any one may ascertain for himself who listens intelligently to bird song in the spring. They are to be heard also in a lesser and more partial degree in the songs of other

[1] Referred to by Sir John Hawkins in the first chapter of his history.

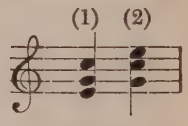
birds. It would seem, therefore, that consonance has a root in nature as well as in man.

The standard, harmonically considered, has also its physical basis. If a single tone be sounded upon the piano with the pedal held down, some effect of a whole major triad will be heard. Its upper tones are the relatives or harmonics of the lower one named the root or generator. Hence the term "root" has passed into musical nomenclature, as signifying what is also called the "fundamental bass" of any chord, *i.e.* its lowest tone in the normal position of ascent by thirds, a tone that requires to predominate to ensure a fully consonant effect. But root in music means no more than this; it is in no sense a generator. Even where the harmonics are the actual chord, they do not occur in the order of the triad series, for the fifth comes at the twelfth and the third at the seventeenth from the generator. The fact that the major triad agrees with the lower part of the harmonic series[1] accounts for its unique position in music, but has nothing to do with the general principle of chord formation, which is found in the predominance of the third.

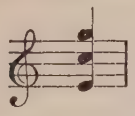
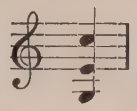
There are varying degrees of consonance in the intervals of the standard harmonically considered. The octave taken by itself is scarcely a harmonic interval at all, because its two notes are in such close affinity as to be hardly more than the doubling of the single tone. The third and sixth produce practically a similar effect in both harmony and melody. Such is not the case with the fifth and fourth, because the successive

[1] This runs as follows: C, c, g, c′, e′, &c.

relations of tonic and dominant must necessarily disappear in the united chord. The skeleton character of the fifth is accentuated in harmony, and the fourth is neither the normal interval of the triad nor the sum of two of these, as is the fifth. It comes thus within the practical meaning of the word dissonance (or discord), the presence of any interval that contradicts those of the consonant triad. Discords are wanted in music for the purpose of relieving the monotony of perpetual concords. A certain proportion of concords to discords is necessary in consonant music, but in other respects the use of discords is purely an æsthetic matter. The effect of dissonance is restless and even painful; that of consonance is necessarily one of repose; of all consonance the effect of the major tonic triad is the most restful.

When the triad is used in inversion 


it is no longer fully consonant, because, firstly, the root is not in the bass, and secondly, both inversions contain the dissonant interval of the fourth without any doubling instead of the consonant third; thus they lack the complete repose of the normal triad. In the case of the second inversion this is very much more noticeable than the first. We cannot end on it without feeling that there ought to be something more to follow. This always indicates the presence of a discord. These two inversions both contain the third and the fourth, but in the case of the first, the interval of the fourth is scarcely noticeable. It has always been held that what are known as the extreme parts (the treble and bass) are much more prominent than the inner or middle

parts, and from the harmonic standpoint, the bass, whether or not it be the root, is even more important than the treble. This accords with the experience of musicians, and is undoubtedly a fact. Therefore the dissonance of the fourth only obtrudes itself if taken from the bass. The most consonant effect of a triad will be gained when its principal tone, the root, is in the bass and doubled in the treble, and when its most consonant interval, the third, is also made prominent. In the first inversion the triad lacks repose because it does not rest upon the root, but prominence is given to the root and third tone in the treble and bass. A more extended position, giving prominence to the fifth tone  is less consonant because the root is covered up in the middle. When we turn to the second inversion we find all these factors at work to reduce its consonance. The interval of the fourth is in the most prominent place possible directly upon the bass, the fifth tone is prominent as the bass, and the root is covered by the third tone. Even if the root be placed uppermost  these conditions are practically unchanged, because the fourth (now become the eleventh) is even more prominent than it was before. If, however, the root be sounded in the bass before the chord is heard in this position, its dissonant effect disappears, because the root is heard as if still sounding, and the result is a triad in the root position.

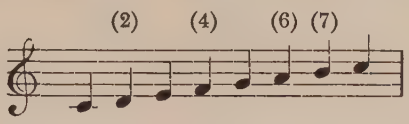
# CHAPTER VI

## THE EVOLUTION OF THE SCALE

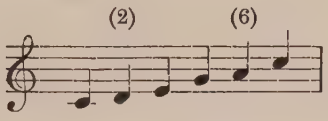
Development from chord to scale—Lack of the semitone—Causes of its omission from early melody—The semitonal instinct of the East necessary to complete the scale of the West—The European development—The Asiatic development—Mode and transposition—Relation of key to mode—Modal development due to lack of consonant intuition—Eastern modal names.

In origin consonant melody and harmony are one and yet in use diverse from the beginning. The primary conception of harmony is stationary, a single chord, while melody steps about continually upon the chord-ladder provided by harmony. So long as harmony is confined to a movement of direction only and there is no change of chord, consonant melody is also confined to the same chord-outline, a steep ladder-like movement. But it is not natural for melody to be always consonant. The voice craves for a smoother, closer movement than the third, and the interval of the second makes its appearance. It is like the substitution of an easy staircase for the ladder. The fact that our German friends have emphasised the ladder part of the definition in their word *Tonleiter* for scale need not disturb us in thinking of it as a stair if we prefer it. The chief point is to emphasise the difference between melody in chord-form and melody in scale-form.

It will be seen that four additional tones are required to turn the chord-ladder into the scale.




To find the ones that were first used, we may look to the common five-toned formula named pentatonic, an incomplete scale, which runs as follows:—




This, it will be perceived, consists of a succession of two minor thirds and three full-tones within the octave. What is lacking to complete the scale is the relation of the semitone. When the fourth and seventh tones are supplied, this relation appears in the rise to the tonic of the seventh, called the leading-note, and the fall of the fourth or subdominant to the mediant or third. The later entry of the semitone is to be explained upon melodic grounds, by reference to two essential factors, the one a condition of vocal music in general, the other due to the constitution of the Western mind.

In the first place we have to reckon with a persistent characteristic of all early vocal music. The intervals are taken downwards, instead of upwards. In all speech the voice naturally falls to the close unless a question is asked which implies the absence of a close; the word cadence means a fall. The

singing voice is no exception to this general vocal instinct, and it is far more natural and therefore easier to start fairly high and fall to the close instead of rising to it. With instruments, however, the natural starting-point is the lowest tone available, the open note of the string and pipe, and as all lower notes are easily produced, it is usual to begin low, and to rise thence to the close. Hence the upward-tending leading-note of modern art, the rise by semitone to the tonic, and the downward-tending one of primitive music, the fall by a full-tone to the tonic. There is rise as well as fall in primitive music, but with very few exceptions the rise takes place first, and the fall concludes the strain. It has been observed that the Orientals, whose systems are principally vocal, think of their scales as tending downwards, and this is natural where no instrumental development has occurred strong enough to turn their thoughts in the opposite direction. It is, of course, possible to fall by semitone to the tonic, but this is opposed to the constitution of the European diatonic scale on account of harmonic relations.

The omission of the leading-note is further due to the slowness of the Western mind in grasping the actual interval of the semitone. Its natural instinct is for thirds and full-tones; the semitone presents itself as an interval that in the development of harmony cannot be ignored nor dispensed with, and that has to be reckoned with in the ordinary practice of diatonic melody and harmony. But that this semitone should lead in itself to new and undreamed-of developments in harmony is a very recent discovery,

the principle of which is not yet fully understood, though it consists of little else than the free use of the semitone instead of its limited use. In this is summed up all that is meant in music by the words chromatic and diatonic. Chromaticism when carried out to its full extent is apt to weaken and even destroy consonance. It is therefore evident that for the origin of this semitonal tendency we must look to some instinct other than the consonant intuition which dominates Western music.

There can be no harmony without this consonant instinct, but there is melody; of a different sort, it is true, from that to which we are accustomed, but still melody, and indeed more essential melody than any that the European system permits of. As Mr. Hipkins sympathetically remarked some years ago in his preface to Captain Day's "Music and Musical Instruments of Southern India":—"The greater freedom in musical intervals that melodic systems allow must be reckoned as compensating in some measure for the want of those harmonic combinations of which our European music has such inexhaustible wealth. What we lose in the possession of this rich estate is that we are effectually barred from the use and enjoyment of a more pliant melody, free from the fetters imposed by consonant chords, a melody which has a great privilege in easily touching the emotions."

This free emotional melody, to which consonant conditions are unknown, has its origin in what may be termed the "microtonal" instinct, the love of minute divisions of pitch. This instinct is at the

root of Eastern music in the same manner as the consonant instinct underlies the Western art. It is true that the Hindus had developed at an early period a diatonic scale which accords practically with our own; but when we learn that this very scale is one of seventy-two in their system, as against one of two in ours, its very different relative significance may be guessed. And notwithstanding the fact that all these seventy-two scales can be written in European notation, the Hindus assert, and doubtless with truth, that their *s'rutis*, the tiny third and quarter-tones, are the essential and primitive foundation of their music. The diatonic scale is a useful formula, and it is the only meeting-place of East and West on the side of pitch; but it represents actual microtonal music no more than it conveys any impression in itself of our harmonic art.

According to the view of music here set forth, scale-form is reached by the two separate paths, typified as European and Asiatic (since in Europe and Asia is found the most striking development of either); these converge till they meet in the common ground of the scale and then diverge again more widely than before.

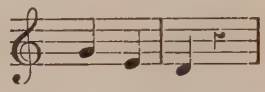
The path of European melody from its origin in the consonant triad has already been suggested; its detail is of a far more complicated character than the Asiatic owing to the transition from consonant to dissonant conditions. It is here evident that fifths and fourths, though subordinate originally to the third, tend to become of greater importance as consonant conditions

give way to a dissonant succession. The third holds its own in giving the main character to the scale, but the fourth and fifth with their sharp, thin decisive character become its natural bulwarks, once the succession or even a part of it is well established. On account of this character they are the easiest intervals in which to tune stringed instruments, and such a tuning also represents the most convenient fingering. Any string stopped at two-thirds of its length gives the fifth of its open note. To the scale the fourth is of special importance, because of its natural division into the two tetrachords already referred to. The European key-circle finds its simplest relation in the interval of the fifth. These are reasons which account for the position of the fourth and fifth in all music, without insistence on priority of appearance.

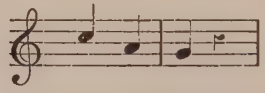
The general division of the octave into two tetrachords is one that appears in melody long before a complete diatonic scale is established. A whole octave is too much to grasp at once, and primitive melody of the European order will be found to lie either in the upper or lower division, or if it pass from one to the other the change is in the nature of an alternation and the two tetrachords are still kept distinct. Only in a later stage of development does the melody move freely from one to the other, breaking down the early division, and the tetrachordal character is thus one of the indications of a primitive melodic type of the European order. In Asiatic melody it is less apparent.

The relation of the triad to the tetrachord in

primitive music may be stated as follows: Taking a downward development of intervals, the first tetrachord commences on the dominant, takes next the interval of the third, and then the second, arriving on the downward leading-note or supertonic—



the missing fourth note being afterwards supplied; the second tetrachord starts upon the tonic, leaps to the sixth or submediant, and concludes on the fifth—



completing itself later in the same manner. It will be seen that this reproduces the pentatonic formula, with the difference that prominence is given to the second tone of the scale, which thus suggests a temporary point of repose apart from the tonic. It is not contended that the use of the pentatonic formula was the only method of passage from chord to scale. Frequently the third alone was filled up, thus giving three notes in scale-form; and fragments of scales existed long before the octave scale was complete. Naturally, an exact uniformity of practice between differing tribes and nations is the last thing to be expected. Infinite variation occurs in detail, but the general trend of evolution is unmistakable. Judging from the persistence of the above-mentioned instances, they are to be regarded as typical of the transition from chord to scale.[1]

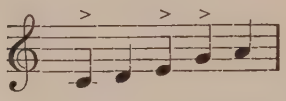
[1] See Appendix, Sections A–F.

The origin of Asiatic melody is in microtonal intervals. Its most primitive type appears to consist of three tones at the distance of a semitone or a quarter-tone from one another, which are incessantly repeated;[1] when this type becomes more developed, it will include full-tones, thirds, and even occasionally a fourth or fifth. A second equally frequent type consists of the following intervals: firstly, a quarter-tone, semitone, or full-tone, succeeded by some kind of third; generally, the smaller the first interval, the larger will be the second. Sometimes two quarter-tones will precede the third. This last is the formula known as the Greek enharmonic genus, but its appearance in such different parts of the world as New Zealand, China, and Java shows that it must be a natural use and not the highly artificial one it has been commonly supposed to be. This elementary type of melody is at the root of the incomplete scales of the East. It has undoubtedly been called into being by the desire for varied emotional utterance in pitch, and its exact intervals differ with the character of the race to which it belongs. There is found in it little of the sensuous delight in consonance which bulks so largely in Western music. It admits the third before other intervals, but this third is not taken from the starting-note up or down as is the case with consonant music. It is a variation upon the microtonal interval, which is its essential characteristic.

It is evident, therefore, that we have now to classify the mass of tone-successions known as penta-

[1] See Appendix, Section N.

tonic into two distinct genera, the consonant and the dissonant. The consonant one is an elementary chord-form based upon the third, the dissonant is an elementary scale-form based upon the microtonal second, from which point of view the third appears as a leap. The consonant type is invariably as follows:—



or a transposition of this; the dissonant type admits of much variation, and even if its tones appear to coincide with the consonant ones, it will be found that in actual use there is no emphasis upon the tones of the triad, no feeling of a triad with additional subordinate notes; the five tones form in themselves an entity which is all sufficing. In addition to this the tuning differs frequently from consonant tuning.

All species of the pentatonic nature are, sooner or later, merged into modal types, and lose both their microtonal and their consonant character. There is no country possessing pentatonic usage that is not now in the act of transition, or that has already passed through it. The scale is a great leveller, a universal highway which erases many interesting national characteristics of pre-modal habit. To this cause may be assigned the fact that Siam, Java, and China have in their present scales no interval smaller than $\frac{5}{8}$ of a tone. Siam has already passed the pentatonic stage, Java is in the act of transition; in China alone has occurred by royal edict a reversion from the completed scale to the pentatonic type. China is

probably the only country where such an edict could avail to cast back the tide of evolution, and if we knew all the ins and outs of Chinese music (a thing, it may safely be asserted, that no foreigner does know) we should very likely find that the reversion has been much less complete than it is stated to be. There can be no doubt that whatever be the present scale-form of these countries, it is of microtonal origin. Only ears trained to the constant hearing of and with the inherited taste for microtonal intervals could possibly have evolved the peculiar scale-tunings of Siam and Java. Of the Siamese, Sir Hubert Parry remarks: "Their sense of the right relation of the notes of the scale is so highly developed that their musicians can tell by ear directly a note is not true to the singular theory." [1] Their scale consists of the division of the octave into seven equal parts, clearly as non-consonant a mode as could possibly exist. Of these degrees the fourth is sharp and the fifth flat, but they approximate the most nearly to equal temperament; the third and sixth are neutral; the general effect of the scale when played upon a violin is a blurring out of the normal intervals. No exact tones or semitones exist; it is a scale seen through a London fog. The Javanese scale uses in about equal proportion $\frac{5}{8}$, $\frac{6}{8}$, and $\frac{7}{8}$ of a tone for its intervals. The Chinese endeavour to approximate to just intonation; this is emphatically an approximation only, for their instruments are not tuned with precision. The result is that to Europeans, if not to themselves, their music

[1] "The Art of Music," chap. ii.

sounds out of tune. At the same time the custom of transposing a ceremonial hymn a semitone higher for each occasion of its performance (at the new moon) is undoubtedly a survival of early microtonal habit, stereotyped into a formula. Mr. James A. Davies, who is best known from his observations of Maori music, gives a fragment of a song which he had frequently heard sung by Chinese in London, containing microtonal intervals.[1] It is more than probable that the popular music of China does not conform to the orthodox formula C, D, F, G, A, and this view is borne out by the strange assortment of notes in the scales of the various wind instruments, and in the frets of the balloon-shaped guitar, all of which differ from one another. The statement that all chromatic notes are inserted for purposes of transposition is inconclusive, because most of them are not in the right places for the purpose, and it is clear that for transposition in general a complete chromatic scale is required, and not a flat or a sharp added apparently at random here and there. These tunings either indicate the present use of chromatic notes or else are a survival from a time when such were employed. Chinese music has run a chequered course, and has suffered much from imperial edicts, particularly at the hands of the Emperor, She Huang-Ti, "the book-destroyer." By his orders all books (excepting those on medicine, agriculture, and divination), and all musical instruments were destroyed throughout the kingdom in the year B.C. 246. The subsequent state of music is thus

[1] See Appendix, Section O.

graphically indicated in a Chinese treatise: "At the rise of the Han dynasty the great music-master, Chi, whose ancestors had for generations held the same dignity, scarcely remembered anything about music but the noise of tumbling bells and dancers' drums," showing that the art had reverted to primitive conditions.

In seeking to understand the relative significance of the scale in the Asiatic and European systems respectively, we shall find that its two main characteristics assume such entirely different proportions as to form practically a difference of kind.

The scale has the variation, firstly, of relative pitch, or mode, meaning the exact relation of each note to the other irrespective of their absolute pitch. Secondly, it has the variation of absolute pitch, the process known as transposition, by which means any mode can be transferred intact to a higher or lower plane of pitch. Both these variations enter into all music, but it is the concentrating of attention upon one or the other that forms the essential difference between Eastern and Western art.

Asiatic scale-form develops a profusion of modes bewildering to the Westerner who probably knows but two, the familiar major or minor. These he is disposed to regard as all-sufficient, and the notion of another seventy or eighty added thereto is hardly to be taken seriously. He is quite unconscious of the fact that this development of modes forms the essential basis of Eastern tonality in exactly the same way as the transpositions of his own two modes form the Western

key-system. What it is in the East that corresponds with the key of the West is probably a blank to his mind. If he has ever heard of a "raga" it is only to be told that it has much to do with gods and goddesses, hours of the day and night, seasons of the year and so forth—in short, that the subject is one of great obscurity. In some such words as these have most of our historians dismissed the matter.

Probably the best way to arrive at an understanding of the strange omissions and commissions of Asiatic scale-form, is to account first for the limitations and the properties of our own. Why have we only two modes, and why and in what manner do our modes become keys?

In answer to the first question, it must be evident that in European music consonance forms a standard that cannot at any moment be ignored. Even when the triad is to all appearance merged in the scale it is in practice reinforced by harmony. This fixed chord-conception, of which Orientals are unconscious, influences the mode of the scale and limits its variations. At the same time our modes are much more variable in practice than in theory, but this is due to the development of harmony and not to a desire for melodic variety. It can be shown that we use actually about a dozen modes, though we admit but two. Still even this is comparatively a small number, the greater part of which are of recent use only; and since we are cut off by our consonant predilections from advanced modal art, by the law of nature it must happen that we develop in another direction. This is the reason why our modes have

become keys. The manner in which a mode becomes a key is by reiterating itself on one and all planes of pitch to the exclusion of other modes, until a definite relation begins to be perceived between the various planes of pitch on which this mode is used, and these relations absorb the mind to the further exclusion of relations between mode and mode. Uniformity of mode with variety of plane of absolute pitch is the essential character of key, and in order to develop a key-system one mode must prevail or at least predominate for thousands of years. The only mode strong enough to do this has been our major diatonic scale, and its strength is due to its backbone of pure consonance, and to the sequential and comparatively even arrangement of its tones with regard to consonance, a modal order from which the West has never far departed. This, in short, is the standard, without which no key-system could have existed, and all other modes are mere variations upon it.

The key-system of the West has thus its origin in consonance.

When we turn back to the East, the first thing that meets us is the lack of the consonant intuition. There is nothing therefore to back one mode against another, nor to limit the variations of mode within the bounds of possibility. One may be regarded with more favour and prove itself more useful than another, but taken as a whole it is a democracy in which all have an equal chance and each has its prescribed form. Under these conditions it is clear that the one ruling mode necessary to create a key-system will never appear,

and hence the European key and its tonality are a *terra incognita* to the East. From the beginning Asiatic melody has a freedom impossible to consonant or partially consonant melody, and this freedom is naturally reflected in the modal plan. As for transposition of modes, the theory of this is to be found fully worked out in old Arabic treatises, where owing to the division into third-tones, no fewer than seventeen transpositions of the eighty-four modes can be made within the octave. These transpositions appear simply as further variations and give no hint of any conception of a key-system, as indeed would be expected. It is at least doubtful whether any practical use was ever made of such transpositions, and in all probability their appearance in a work of theory is due to the desire of working out all the possibilities rather than to the practice of the musical imagination. In Indian theory and practice no attention is paid to absolute pitch; the singer suits his own voice, and is guided by the pitch of the drum, which forms his invariable accompaniment.[1]

[1] "The key-note is always *Sa*, and is taken of any pitch to suit the requirements of the performer, or the nature of the instrument." (C. R. Day, "The Music and Musical Instruments of Southern India and the Deccan," p. 37.) This is also the view stated to be usually held of the Hindu theory by modern musicians. (S. M. Tagore, "The Musical Scales of the Hindus," p. 95.)

THE NAMES OF THE DEGREES OF THE SCALE IN THE VARIOUS ASIATIC SYSTEMS WITH THEIR ENGLISH EQUIVALENTS

| No. | English. | Hindu. | Arabic. | Chinese. | Javanese. | Mongol. |
|---|---|---|---|---|---|---|
| 1 | Do | Sharja . . Sa | Rast | Koung | Bem | Ho |
| 2 | Re | Rishabha . Re | Doukah | Chang | Goeloe | Ssu |
| 3 | Mi | Gándhára . Ga | Sihkah | Kio | Dada | Yi |
| 4 | Fa | Madhyama Ma | Tckarkah | Pien-tché | Pelog | Shang |
| 5 | Sol | Panchama. Pa | Pengkah | Tché | Lima | Ch'ih |
| 6 | La | Dhaivata . Dha | Chechkah | Yu | Nem | Kung |
| 7 | Si | Nisháda . Ni | Heftkah | Pien-koung | Barang | Fan |

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# CHAPTER VII

## PRIMITIVE HARMONY

Two-part consonance—Principle of chord-sequence—Melodic discord—The minor triad—Dominant harmony—Primitive harmonic material—The function of the bass—Consecutive octaves and fifths—Instrumental harmony.

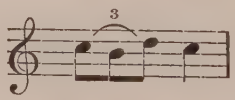
PRIMITIVE harmony is traceable to two distinct sources. The first of these is the standard triad already described, the second is the accompaniment of melody by a lower part in thirds, which seems to be common to all races of consonant predilections.[1] It is, however, a less primitive usage than the single triad, since it involves the diatonic scale. The thirds are not all major or all minor, but vary diatonically according to the requirements of the scale. Melody here has a much greater freedom than when confined to the chord-ladder, but the harmonic result is only of value as a certain indication of the existence of consonant feeling. It is, strictly speaking, not harmony at all, for there is no chord-conception necessarily involved. We may, if we like, read chords into it by the light of developed knowledge, but all that is really there is two melodic parts united by the essential consonant interval. We may say that, starting from the perception of the third, harmony adds third to third, for all chords are thus built up, whereas melody here unites the scale principle

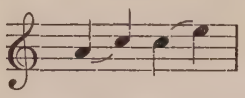
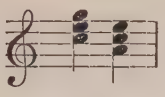
[1] See Appendix, Section G.

with the single third. The result is a harmonic consonance, which will not in itself lead to the development of harmony, because the harmonic triad requires at least three synchronous voices. Two-part consonance may vary its monotony by moving in sixths, or by the single insertion of a fifth, fourth, second, or seventh, but this represents its whole development. Its popularity is due to the ease with which it combines a free melody with the charms of consonance. None of the difficulties of true harmonic movement are in this case grappled with, difficulties which arise solely out of the combination of melody with harmony. For, though it is possible to have melody without harmony, there cannot be harmony, beyond the single detached chord, without melodic movement.

When we proceed to link chords together, at once the melodic principle enters in. Purely consonant chords and occasionally dissonant ones that are nearly related to one another can be used disconnectedly in the accompaniment of melody, and doubtless have been so used from the time when some stringed instrument was first invented upon which one or two chords could be thrummed. But primitive harmony is mostly if not entirely vocal, and displays an instinct for the melodic succession of chords—that is, chords which are formed of at least three parts each proceeding in a melodic manner, the chords being linked together by means of the scale principle. As soon as more than one triad begins to be used, this principle makes its appearance, and it is hard to say whether the desire to sing in scale-movement calls for other chords, or

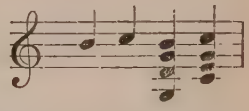
whether the love of chords in succession brings in the use of scale-form in several parts. Be this as it may, wherever chords are sung, the two ideas of chord-sequence and scale-movement are found together.

Thus the history of Western pitch-outline is that of the combination of melody and harmony in the key, and neither can rightly be understood without the other. As melody grows dissonant, the difficulties of its combination with harmony begin. For convenience' sake we tabulate dissonant chords and name them fundamental discords to distinguish them from the passing discord which is of a more obviously melodic character. Harmony itself, however, is essentially consonant, and the natural introduction of dissonance into music is due to melody. Primitive harmony is purely consonant and the earliest discords in any consonant music are melodic ones. These run naturally upon the lines of the scale, as passing-notes linking up the intervals of the triad, and varying greatly in character according as they occur upon accented or unaccented beats. In the latter case, their only result is to produce scale-form, or to make variations upon the consonant tones  generally called changing-notes, but a new effect is introduced when they are strengthened by the strict accent. This causes a retardation of the consonant tone which would otherwise have occupied the accented position, but is now relegated to a less important one, and thus a different emotional effect is produced.

In melody it is more than probable that this effect has been fruitful in new harmonic suggestion. The fact of special prominence being given to a non-consonant tone calls attention to it as a centre of new harmonic relations—in short, as the bass of another triad. The fifth tone of the pentatonic formula, A, is of no importance harmonically while used merely as a passing or changing note, but once let it appear strongly accented, especially if it be used in relation with C above it, and a new triad is at once suggested. We have the two thirds, but in a different order—  The minor third is now at the bottom and gives its name to the triad. This minor triad is similar to the major one in its tonalitive relations of the fifth and fourth ; the difference exists only in its consonance. The third next the root is necessarily the more important one, and by giving this prominence to the minor third, which is indefinite in character, a triad of a weaker, less consonant type, is produced. These two triads  are very closely related to one another, having two of their three notes in common. The second is generally known as the "relative minor" of the first.

Hence it happens that melodies founded upon the pentatonic formula frequently have a curious effect of wandering between two keys (major and relative minor) without ever settling in either. The reason for this lack of a defined centre is that the chord which is essential to the narrowest possible harmonic conception

of key is incomplete. Its essential third is missing. This is the triad of the dominant. It has been already pointed out that the single tone of the dominant is able to suggest motion to and from the tonic, but that this effect is obscured by the third of the chord when used in arpeggio. To produce a satisfactory harmonic effect of this nature the complete triad of the dominant is required. The third of the dominant is the leading-note, which rises naturally to the tonic by step of a semitone, thus emphasising the return of the tone-movement to its appointed centre of repose—



These two chords, tonic and dominant, are the foundation of the harmonic key. It is difficult to realise that this familiar tone-formula has not always been at the root of our music. But it will be observed that the early developments of the melodic and harmonic keys respectively do not exactly coincide. In both the pentatonic and the harmonic formula the subdominant of the complete melodic key is absent, but whereas the melodic type takes the submediant and omits the leading-note, the harmonic type does exactly the reverse. From the harmonic point of view, after the three tones of the tonic triad and the supertonic note, the leading-note is unquestionably the most important tone of the scale.

Part-singing, however, once advanced beyond the single triad, soon requires all the tones of the scale, although its harmony long remains in what is to us a very primitive state. The triads on the

subdominant, supertonic, or leading-note, will sometimes replace the dominant in its alternation with the tonic chord, and gradually may appear in addition to the dominant, by which time the submediant triad may also be found. Harmonic discord is confined to the dominant seventh, the addition of a minor third to the triad, which occupies a unique position amongst discords in its priority of appearance. In these half-dozen chords is contained the whole of primitive harmony.

The actual development appears to run as follows: Familiarity with singing in thirds suggests naturally the movement of the two upper parts, the melody being at the top, but the function of the third part, the bass, has yet to be discovered. It hangs at first on one note with thirds moving above it, and is called the pedal bass, or possibly the third is taken from the bass, with a single melody above. This continuation of one note in the bass is not in itself a harmonic bass unless there are two voices above it to complete the chord. Combined with a melody only, it is merely a drone, of no harmonic significance, and is found equally in Asiatic music. When the bass ceases to cling to the tonic and takes a step, very probably of a second, to another note, the difficulties and the real development of harmony begin. Three moving parts are a very different matter from two, and instinctively the true harmonic bass is felt to be on a different footing to the upper parts. Its movement is sluggish, and tends towards alternation of two notes, which generally involves alternation of triads. The

distinct function of the bass as the supporter of the harmony is soon realised, and is seldom confused with the airy freedom of the upper parts. Thus, to find the natural development of harmony, we must look to the movement of the bass. The more the variety of actual bass-notes and the freer the movement, the less primitive the music. The true harmonic bass, however, even in an advanced stage of development, never approaches the agility of the upper parts. The artificial bass of the ecclesiastical contrapuntal eras is not a bass at all in the harmonic sense, but a melodic part in the bass—a very different thing. The dictum of counterpoint that all the parts must be on the same footing, is entirely opposed to the natural practice of harmony which puts the bass from the beginning upon a different footing from the other parts, a distinction that is maintained throughout the whole range and course of rhythmitonal art.

Until four distinct parts are sung, chords in succession are necessarily somewhat incomplete, but it is evident from the examples[1] we possess that three vocal parts were sometimes more than the performers could attune entirely to consonance; an upper part may lapse into octaves with the bass, and queer intervals occasionally occur. Nevertheless, what is most remarkable about this primitive harmony is its general sense of harmonic fitness in the relations of intervals. Octaves are in no sense dissonant intervals. Consecutive octaves between vocal parts are usually avoided in close vocal part-writing, because they involve the lapse

[1] See Appendix, Sections H, I, J.

of one part and the over-balance of another by its doubling in the octave, which means loss of harmonic balance and fulness of tone. But in all other modes of use the octave is a perfectly harmless interval that can be freely employed consecutively. Not so the fifth. We are all painfully aware that consecutive fifths are impossible alone, and primitive singers of harmony were of our opinion. As we, they disguised the skeleton character by the addition of thirds. By this means the ear ceases to detect the disagreeable effect produced by two fifths in succession, since it is satisfied by the relations of the thirds. No subject in music has been so frequently dogmatised upon as this, and no rules have been more entirely disregarded by composers when they happened to want the forbidden effect. The whole matter is a question, not of the actual existence of fifths in consecutive chords, since these are more often there than not, but of the manner in which these fifths are introduced, and the intervals by which they are accompanied. All the rules on the subject have this one object in view, the disguise and not the elimination of the fifth, since the latter is impossible. That some disguise of bare fifths is required all will admit. The degree of disguise required is the debatable point, and this varies with the nature of the composition, with the character of the effect to be produced, and last, but not least, with the individual taste of the composer. The ordinary rules laid down for the avoidance of fifths in two consecutive parts accord with primitive vocal practice, and prescribe the conditions generally best suited to purely vocal part-

writing, but entirely ignore those of instrumental music generally, and especially of orchestral work, in which many varied effects can combine to render fifths unnoticeable. The training of the ear to detect the effect of consecutive fifths under all conditions would prove of greater service to future composers than a deaf obedience to rules frequently at variance with modern usage, and of which no reasonable explanation can be given. The primitive singer had certainly no rules to follow, and, therefore, the fact of the absence of consecutive fifths from primitive harmony must be due to the instinctive avoidance of harshness in pitch-outline, an instinct essentially consonant which exists in all European races, and to a great extent in America and Africa also, only requiring development by practice.

The evolution of instrumental harmony is necessarily a later growth, but it follows on the lines of vocal development. It does not seem likely that instruments have had anything directly to do with the evolution of actual chord-material. They may account for curious intervals occasionally to be found in native music, but these are mere passing incidents. The instrument has conformed itself to harmony, not harmony to the instrument, but in the harmonics of the natural pipe and horn and string lies the physical connection with the consonant triad. On account of the limitations of early instruments, instrumental harmony is considerably slower of development than its vocal forerunner, but it is by no means an exact imitation of vocal harmony. From the beginning the distribution of the tones of the harmony varies according to the nature of the

instrument. Thus instruments giving a sustained tone will produce sustained chords; the twanging of strings gives rise to the broken detached chords; the homogeneous character of vocal harmony disappears, and many varied types spring up, which form the tone-material of the native orchestra, the prototype of European orchestral evolution.[1]

[1] See Appendix, Sections K, L, M.

# CHAPTER VIII

## ADVANCED HARMONY

Limits of chord-formation—Summary of diatonic chords—Development due to primary principle—Augmented and diminished triads—Major and diminished sevenths—Ninths and minor sevenths—Definition of chromaticism—Chromatic modal inflexions—Summary of European modes—The dominant leading-note—Blending of modes in the key—Chromatic harmony—Principle of chromatic chord-sequence.

THE principle of harmonic formation, from the triad upwards, being that of ascent by thirds, all chords in their original positions are built up of thirds, of two, three, or four thirds respectively. It is needless to add five or six, after the manner of some harmony systems, for these so-called chords are practically never complete, and any additional notes which cannot be reduced to the four-third chord are easily explainable as melodic discords. Even the four-third chord, the chord of the ninth (so named because four thirds make a ninth), is but little used in comparison with the two-third and three-third chords, the triads and chords of the seventh, within whose inflections the whole of harmony is practically contained. This may be studied in the diagram on the following page.

The evolution of diatonic harmony is, it will be observed, a very simple matter. Each tone of the scale, in both major and minor modes, bears its triad and its seventh, the intervals of which vary according

to the modal diatonic inflections. Not all of these chords are by any means equally useful, since they include all types of discord, from the harsh and strident to the weak and indefinite. Yet they have nearly all a certain value in extending the limits of the harmonic key, and bringing a much-needed variety into diatonic harmony.

| | Major Mode. | | Minor Mode. | |
|---|---|---|---|---|
| | Triad. | Seventh. | Triad. | Seventh. |
| 1. Tonic . . . . . | Major | Major | Minor | Major |
| 2. Supertonic . . . | Minor | Minor | Diminished | Minor |
| 3. Mediant . . . . | Minor | Minor | Augmented | Major |
| 4. Subdominant . . | Major | Major | Minor | Minor |
| 5. Dominant . . . | Major | Minor | Major | Minor |
| 6. Submediant . . . | Minor | Minor | Major | Major |
| 7. Leading-note . . | Diminished | Minor | Diminished | Diminished |

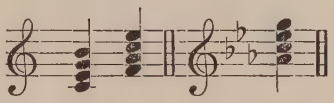
The development of harmony now begins to assume more of an æsthetic character, and the preference for one form of discord or another is largely a matter of national or personal idiosyncrasy. Yet it is not these influences which have actually moulded harmonic art into its present shape. Its general evolution is due to its adherence to the primary principle of ascent by thirds; its variety of æsthetic character depends on the nature of these thirds composing its chords and on the order in which they are arranged.

It has already been shown that the constitution of

a consonant triad demands one major and one minor third. Nowhere could the effect produced by two major thirds or two minor ones in juxtaposition be better observed than in the dissonant triads. The augmented one consists of two major thirds, and is a harsh dissonance, because each major third suggests its own character; the diminished triad contains two minor thirds, which blend together into the softest type of discord. The names of these triads are taken from the fifth (which they contain) reckoned from the root; two major thirds extend the normal fifth to an augmented one, the two minor thirds contract it to a diminished fifth; that it is the two major thirds and not the augmented fifth that form the dissonant effect is evident from the fact that if the central third tone be removed, leaving the bare fifth, all effect of dissonance disappears. The augmented fifth is an exactly similar interval to the minor sixth, which is a concord, and therefore when taken alone it is indistinguishable from the sixth, which is the more usual interval.

It is fortunately impossible to have a chord of the seventh consisting of three major thirds, because the interval of the major seventh does not admit of more than two, and one minor one. Nature herself has thus set a limit to the clashings of major thirds; but we have more than enough of them in the strident and even painful effect of the chords of the major seventh where the ugly interval of the seventh adds to the discord of the rival thirds. The best of these is the one formed upon the major triad,

with the minor third as mediator separating the two major ones—

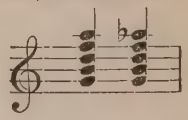



There is nothing, however, to prevent the union of three minor thirds in a chord of the seventh (called diminished), and in the same way as the diminished triad repeats and intensifies the effect of the single minor third, so the diminished seventh increases still further the indefinite character of the diminished triad. There is nothing in the minor third to clash with another interval; it possesses none of the decided nature of the major third and therefore combines well with it, but left to itself it resembles a sheep without a shepherd. Its nature seems to be that of gentle indeterminate hesitation; it is the nonentity of music. Although belonging diatonically to the leading-note of the minor scale, the chord of the diminished seventh is not in itself suggestive of any key, and practically it is at home anywhere and can precede or follow any other chord, but the mind soon wearies of its ambiguity.[1]

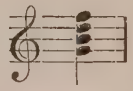
It is evident that the chords most useful to music

[1] As the octave divides into four minor thirds, there are naturally only three of these chords in existence in equal temperament, since at the minor third the first inversion of the first chord presents itself, all the inversions being necessarily similar to the root position, as the chord contains but one kind of interval. By means of altered notation all these inversions are made to appear different chords belonging severally to various keys, and this notation presents an extreme case of the making of distinction without difference. It is caused by the desire to bring the chord into an appearance of key-relation which it does not naturally possess.

are those which contain one major third, and not more than one. These, in fact, form the indispensable part of diatonic harmony. A possible exception exists in the major ninth, which adds a major third to the chord of the dominant seventh, where, owing to their greater distance apart, separated by two minor thirds, the effect of the major thirds is not disagreeable—

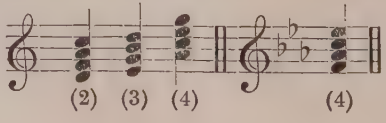


combined as they are with the major ninth, a smoother interval than the major seventh. The chord of the minor ninth, with three minor thirds, and but one major, has the disadvantage of a harsh interval in its ninth. Such is not the case with the chords of the minor seventh. Here the most satisfactory effect is obtained when the major third is at the bottom—

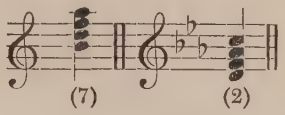


This is the familiar chord of the dominant seventh, the type of its kind, to be found only upon the dominant in diatonic use. It occupies a similar position among sevenths to that of the dominant triad amongst triads; it is even more characteristic of the key than the triad, since it cannot occur diatonically in any other scale.

The last two chords of the minor seventh lack its foundation of a major third, and therefore its major character. The more usual type has the major third in the middle (the same form as the minor triad)—



and the remaining one has the major third at the top—




and, being built upon the diminished triad, takes its character from that chord.

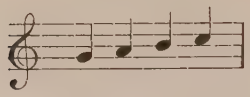
Nearly all these chords are capable of three inversions, which do not greatly change their character, since they are dissonant in the root position, but the dissonance is always more marked in the second inversion, owing to the prominence given to the fourth.

It remains now to consider the chromatic types of harmony, those that carry the key beyond its melodic limit of the diatonic scale. Consonance and dissonance assume severally an entirely different character according to their combination with diatonic or chromatic relations, and chromatic forms of dissonance made their appearance quite as soon as, if not before, those of consonance.

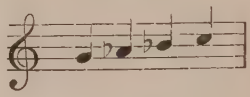
It must be explained here that this use of the word chromatic does not imply a substitution of the semitonal scale for the diatonic one. It means a chromatic (a semitonal) variation of the diatonic scale. It is the varying of the standard mode by other forms of inflection which do not offer sufficient variety of harmonic material to be considered as independent modes in themselves. We practically sum them all up in the word "minor," but we have not distinctly realised how many actual modes are contained in this type. Clearly it is not a single scale, as is the major, for three separate modes are recognised as belonging to it.

It will simplify the matter to consider it from the point of view of the tetrachord, rather than of the complete scale. There are but four tetrachords in general use in European music, for any others depart too far from the standard of the major mode to be of practical service. They may be named as follows :—

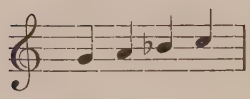
Diatonic.



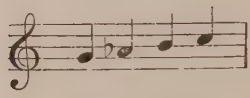
Chromatic.



Neutral.



Augmented.



It will be seen that the two centre notes are the only variable ones; the chromatic tetrachord is the exact reverse of the diatonic, two full-tones and a semitone taken downwards instead of upwards; the neutral is one combination of the two, and the augmented the reverse combination, containing the augmented second from A♭ to B. All these four tetrachords are to be found in our ordinary major and minor modes, which present, however, only a few of the possible combinations. The major consists of two diatonic tetrachords; the minor has the neutral for its base, and its upper part may be diatonic, chromatic, or augmented, as follows :—

C D E♭ F { G A B C (Diatonic). / G A♭ B♭ C (Chromatic). / G A♭ B C (Augmented).

It appears from this that our minor scale does

not, like the major one, consist of two similar tetrachords. The reason for this is apparent. Any repeated tetrachord other than the diatonic alters the chord of the dominant, and although this very altered chord is in common use, we regard it as an exceptional form, and not as a normal one. Therefore the mode in which it occurs must be an exceptional and not a typical one. There is no reason, however, why we should not recognise these and other kindred types based upon the four tetrachords as occasional modes, which indeed accords with the practice of later composers, but we need not give them to children to play upon the piano.

Those modes based upon two similar tetrachords sound best melodically, but the tetrachords admit of all possible varieties of combination excepting those which mix diatonic and chromatic together. Owing to the opposite nature of these two tetrachords, they are not satisfactory when placed in juxtaposition, the scale appearing to have no unity in itself. The modes work out as shown on the following page.

It will be seen that the tetrachords account for the use of all the twelve tones of the octave in the scale of C excepting F♯. This note occurs in the natural subdominant mode and is found in Hungarian and Hindu scale-form. It could, of course, be considered as forming another tetrachord, but this seems foreign to European custom, which dislikes what is known as the tritone,[1] and limits the use of it to one

[1] Three full-tones in succession, C, D, E, F♯.

HARMONIC MODES.

Major—

C D E F G A B C

Minor—

C D E♭ F G A♭ B C

Half-Major—

C D E F G A♭ B C

Half-Minor—

C D E♭ F G A B C

Subdominant—F–f or

C D E F♯ G A B C

Augmented-Minor—

C D E♭ F♯ G A♭ B C

SEMI-HARMONIC MODES
(with Minor 2nd, or Minor 7th, or both).

Supertonic—D–d or

C D E♭ F G A B♭ C

Mediant—E–e or

C D♭ E♭ F G A♭ B♭ C

Dominant—G–g or

C D E F G A B♭ C

Submediant—A–a or

C D E♭ F G A♭ B♭ C

(The mode of the leading-note B–b is inadmissible through lack of a dominant tone.)

Augmented 1—

C D♭ E F G A♭ B C

Augmented 2—

C D♭ E F G A♭ B♭ C

Augmented 3—

C D♭ E F G A B♭ C

Augmented 4—

C D♭ E F G A B C

Chromatic 1—

C D♭ E♭ F G A♭ B C

Chromatic 2—

C D♭ E♭ F G A B♭ C

mode only. Whenever this note occurs in the key of C it is most often as a rising semitone leading to G in precisely the same manner as B rises to C. It is therefore much simpler and more accurate to regard it as a leading-note to the dominant, strongly suggestive of the key of G, though not necessarily implying the leading-note of that key. The dominant harmony stands on a different footing from that of any other, forming what may be called the pivot of the key, and undoubtedly it does in practice possess a leading-note for harmonic purposes. Melodically any degree of the scale can be approached by rising or falling semitone in harmonic music without involving any change of key, such notes appearing as chromatic, which means that, though foreign to the mode, they belong harmonically to the key. Hence it is possible to mix up modes in a way impossible to Eastern music, where tonality depends upon each mode being kept distinct. In our own art we find it convenient, as a rule, to distinguish clearly between major and minor, but even these are frequently mixed. E♭ and A♭ are common in C major, and A♮ is actually incorporated into one of the recognised minor types. It is only in purely melodic music that modes are kept distinct, for the general tendency of harmony is to blend these together. Strictly speaking, there is but one form of key, and this is subject to modal inflections. Of these the minor is the only typical mode, because it alters the chord of the tonic, and this chord can have but one inflection. The dominant triad or

seventh has no inflection whatever. Upon the essential foundation of these two chords the key grows by continually adding other chords on the lines of the major and afterwards of other modes.

It will be noticed, however, that the semi-harmonic modes above given do not admit of dominant harmony. They lack the leading-note or the normal supertonic, or both. Harmonically all these have a tonic only, which is not in itself a key without the dominant; other triads can be used, but the key-conception remains incomplete. Thus, when a chord accompaniment is added to such a mode this must be confined strictly to a few consonant triads, else all the modal character will be destroyed and replaced by that of the key.

The development of the function of the dominant in its early stages admits of only major and minor modes, but when this has become thoroughly established then other modal types begin to assert themselves in the way of semitonal inflection, and thus appears what is called chromatic harmony. Its tendency is at first to strengthen the position of tonic and dominant by leading up or down to these by semitone. In the diatonic scale only one semitone of this kind exists, the leading-note. The other semitone of the scale falls to the mediant, which is less important, and when taken in the reverse order is apt to suggest the leading-note of the subdominant key, a fifth below. For this reason it is always easier to pass downwards from one key to another, that is, to increase in flats or decrease in sharps,

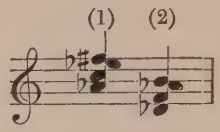
than to proceed in the reverse order, because, as already stated, the leading-note to the dominant (the next key sharper) lies outside the diatonic scale, whereas the leading-note to the subdominant key (the next key flatter) lies within the scale.

The first chromatic additions of the semitonal nature are those above and below the dominant note (the minor submediant and the dominant leading-note) and the semitone above the tonic—

To these must be added the minor third of the scale. The chords founded upon these notes are chiefly dissonant and must resolve upon dominant or tonic. The dominant having its leading-note is now capable of suggesting a new tonic a fifth higher, and the chords leading to it are of the nature of *its* dominant. The actual dominant seventh of this new key is borrowed, and appears upon the supertonic of the original key. The major triad on this degree is often used instead of the chord of the seventh, and in the same manner—

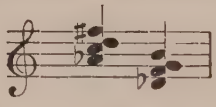
A chromatic chord, called the chord of the augmented sixth, and identical with the tones of a dominant seventh, can be used on the minor submediant (1) and the chromatic supertonic (2). The seventh is now

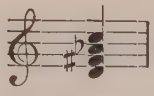
written as an augmented sixth in order to show its inevitable semitonal tendency—



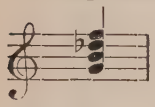

The augmented sixth from the minor submediant is the dominant leading-note, and the corresponding interval from the chromatic supertonic is the diatonic leading-note. To write such intervals in their original notation of sevenths, as a flattened dominant or tonic respectively, would be to ignore the reason for the existence of these chords.

Two other chromatic chords in similar positions, and differing by a semitone only from these, are called the chords of the augmented fourth and sixth—

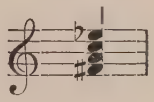


They have, however, a different origin. The one which appears to be on the minor submediant contains the interval of the minor diatonic seventh of the supertonic. This points to its origin as a diatonic seventh on that degree, with its third and fifth chromatically altered to include the augmented sixth on the minor submediant—  In this altered form the chord consists of two major thirds divided by a diminished third. As this so-called third is practically not a third at all, but a second in disguise, it is more often than not inverted to form an augmented sixth,

which must resolve upwards and downwards upon the octave of the dominant. The corresponding chord on the chromatic supertonic is merely the dominant seventh with flattened fifth, which produces a diminished third or augmented sixth that must resolve on the tonic—

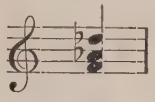


A diminished seventh on the dominant leading-note is in very common use—

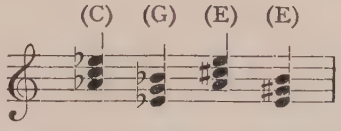


Many other chromatic dissonances are used, but these appear as passing chords, not being recognised as fundamental discords, and are usually resolved semitonally.

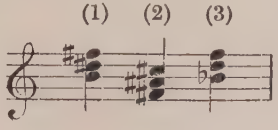
Chromatic concords first made their appearance on the same degrees as chromatic dissonance, a characteristic one being the major triad known in inversion as the Neapolitan sixth—



Later on the principle of tonic relation asserted itself, and all major triads containing a tone of the tonic triad were gradually added—




To these followed the major triads on the leading-note (1), and dominant leading-note (2), leaving only that on the minor seventh (3)—



This last triad had been in constant use in ecclesiastical music, and was easily assimilated without disturbance of the key.

The chord-relations of major chromatic triads with those of the minor key, of minor with major, and minor with minor, have each a necessarily different character, but the same principle of semitonal inflection underlies their effective use and combination, as in the case of major with major, and so long as the tonality is understood, there need be no limit to the free use of chromatic harmony. The restrictions commonly laid down under the head of "false relation" are arbitrary and useless. The essential unity of tonality must be maintained—*i.e.* two parts must not sound as if they were proceeding in different keys—but apart from this general principle this is a matter not so much for the text-books as for the actual training of the ear, which must frequently decide each case on its own merits. It is a practical matter, varying, like the use of consecutive fifths, with the form, style, and character of the composition, and the idiosyncrasy of the composer.

# CHAPTER IX

## THE COMPOUND STANDARD OF TONALITY

Definition of key—Compound standard of pitch compared with that of time—Syntonic and atonic proportions—Growth of the key—Relation of discords to the key—Resolution of discords—The principle of the bass—Effect of chromaticism upon the key—The key-circle and modulation.

THE word "key" in music does not imply only a selection of tones in scale-form or an aggregate of chords, but conveys the idea of the rhythmic movement by means of which definite pitch-relations are recognised. Thus we may know all the details of harmonic formation and yet have no knowledge of the key. It is not a solid entity that can be pulled to pieces and accounted for like a chord, but it is a condition of rhythmic movement in music that is based upon the formulas of the scale and the chords, the growth of which we have traced from the primitive state upwards. The nature of this rhythmic movement has already been described as circling away from or gravitating towards a given centre. This centre is the tonic triad, any departure from which to other tones or chords calls for a return to the point started from. In the primitive condition it is mainly the alternation between the tonic and some other triad, normally the dominant, that causes the rhythmic effect. This is not a mere pendulum swing from side to side, but a setting out

from or towards a clearly defined point, whose position affects the whole tone-movement, drawing it back at intervals, regular or irregular, to the central base which is immediately recognised by the ear. Such definite alternation soon vanishes into a larger movement. If we consider the harmonic key as depending originally on the tonic on the one hand and the dominant on the other, the whole remainder of harmonic possibilities has come in upon one side only. Yet the tonic still weights its own end of the scales in spite of the mass of chord-detail, consonant and dissonant, which is opposed to it. This is a relation which is the essential fact of the modern key; the fact of tonic predominance against overwhelming odds. The simile of a stone thrown into a pond may serve as a further illustration of this unique musical rhythm. However far the circles may widen out, they do not affect the position of the centre, which remains always a point of rest.

Technical terms are needed to convey the idea of this rhythmic motion, for which purpose the words consonant and dissonant are useless, indicating only conditions of harmony. We will, therefore, name the centre of repose "syntonic" and the tone-movement through other chords "atonic." It is possible for a whole movement to be in syntonic outline, as is Wagner's "Rheingold" Prelude.

These outlines can exist only in alternation, if we except rare instances of a mixture of tonic and dominant harmonies. In these cases neither the syntonic nor the atonic impression is complete, and a mixed effect is intended. It is clear that this compound

standard is of a very much more complex nature than that of time-outline, and this is due partly to the relations of consonance and dissonance, but still more so to the manner in which this standard has grown up.

While the compound standard of time involves difficulties of varying and sometimes irregular numbers of beats in the bar, it is nevertheless of an entirely strict character, that is to say, it consists solely of time-beats necessarily all of equal duration.[1] The peculiarity of the compound tonalitive standard is that it consists of the syntonic outline, the simple standard, in combination with atonic outline—that is to say, that the larger standard, the key, represents a higher stage of development, in which what was once variation upon the tonic is now become essential to the key. In addition to this, the melodic and harmonic standards are distinct from one another, and yet must admit of combination. In time-outline, where much of the relations are practically synchronous, such conditions could not exist, but in pitch-outline all chords are heard only in succession, and their relations are thus successive only. For this reason there is found a milder order of contrast and a greater degree of relation in pitch-outline than is the case in time-outline. This is a relation apparent in the actual structure of atonic chord-outline. An examination of its material shows that the syntonic tones are not excluded from it, provided they are used in atonic relations.

Since there are only twelve tones in the octave, and

[1] Except in cases of accelerando or ritardando, either of which cause a relaxation of the standard.

from these twelve major and twelve minor triads are made, it is evident that each tone must be used three times in major triads, occupying each time a different position, and also three times in minor triads under similar circumstances. Of this material syntonic outline occupies one quarter, being in the proportion of three tones to twelve. Atonic chord-outline thus consists of a network of tones, fully a quarter of which is composed of syntonic material. Out of the eleven major and twelve minor triads available in any major key, six major and three minor triads contain one syntonic tone each, and three minor triads contain two syntonic tones, leaving only five major and six minor triads of purely atonic origin, or less than half of the whole number. These syntonic tones are the strands on which the web of the key is spun.

When we turn to purely diatonic relations the proportion of syntonic to atonic tones rises from a quarter to one-half. There are but four atonic tones in the scale as against those of the tonic-chord and its octave, the eighth degree of the scale. The diatonic limit indicates that strictest type of syntonic and atonic relation which is the melodic key. European melody is thus seen to be a far stricter species than harmony, and this melody as melody loses its special character when the bounds of diatonic outline are overpassed.

Harmony, as has been shown, continues to expand itself in the direction of dissonance and chromaticism. Upon the well-worn paths of diatonic dissonance chromaticism floods in, obliterating the old diatonic relations as boundaries, and enlarging the movement

of circling rhythm until all tones are brought within the compass of one key, or, in other words, are drawn towards the one centre. One may well ask, What is the compelling power in this single tonic triad that can so attract all other chords towards it that they become mere satellites of its system? The truth appears to be that the compelling power resides, not in the triad itself, but in the desire of the mind to return to it, the desire for orderliness and coherence, which in this case can be gratified only by the recurrence of a familiar central point, whence radiate the definite pitch-relations that knit the key together.

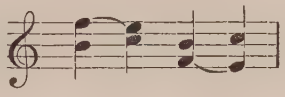
The same rhythmic desire causes the phenomena of the resolution of discords considered as a whole in its relation to the key. So long as the relation of the discord to the key is perceived any dissonant effect may be passed through. The modern growth of discords is an essential part of the growth of the harmonic key, the rhythmic feeling for pitch-relation, which is largely dependent on memory, and is therefore capable of an immense development. Where the centre of the key lies can now be clearly perceived through a mass of discords that would have completely obscured it even a century ago. All special rules for the employment of discords are necessarily of a temporary character, and are liable to be continually superseded by new rules of greater elasticity. The ultimate arbiter is always the rhythmic feeling for pitch-relations, and it is this rhythmic feeling that decides the duration of the discord. What might be acceptable as a passing effect would destroy the balance of

the key if given the permanence due to a concord; hence the need for the ultimate resolution of discords.

The general custom of resolution follows the lines of the normal movement of parts in scale-form between chord and chord, and thus the discord moves by step of full-tone or semitone to a note in the next chord. Unless they rise by a semitone, dissonant notes commonly follow the natural vocal usage, and fall to their resolution, but this is just as frequently another discord as a concord. A concord provides more sense of repose than a discord, but the complete repose of the key will be found only in the tonic-chord. To the rhythm of circling movement direction to or from the tonic is more important than the exact harmonic intervals taken on the way; these are of value only as they provide variety, and serve to indicate the pitch-relations by means of which the circling movement is perceived. Thus there is nothing to forbid the temporary resolution of one dissonant interval upon another, nor any changes of harmony nor pauses of silence that may take place between the introduction of a discord and its resolution. If a discord should be made the final chord of a piece, it is clear that no resolution is desired because the final impression is to be that of unrest, but this is obviously an exceptional case.[1]

[1] The formula known as the preparation of a discord is the sounding of a dissonant note previously as a concord, and the custom arose at a time when people were obviously afraid of the sound of any discord, unless it became one by simply being held on, and not by being first sounded as a dissonance. It is one means of obtaining a smooth effect if an even flow of harmony is desired, particularly in the case of harsh discord, but it is by no means essential in the case of any dissonant chord. Its result is naturally to lessen the effect of the discord in question.

There exists, however, a special relation in diatonic harmony which decides the movement of the bass of any dissonant chord in its root position. This is the relation of the dominant seventh to its tonic, the typical atonic-syntonic movement. Owing to the rhythmic principle of gravitation to a centre, the dominant seventh leads inevitably to the tonic, and its passage to any other chord appears as a variant of the normal use. The diminished fifth contained between its third and seventh tones can scarcely resolve elsewhere but on the tonic major third, for diminished intervals resolve naturally by contraction. Their inversions, the augmented intervals, go inevitably in the opposite direction—



but both preferably by semitonal motion. The dominant goes thus to its tonic, and the roots of these respective chords form the melodic interval of the rising fourth or falling fifth. Since the dominant is the typical seventh, it is not surprising to find the other sevenths imitating its procedure, and making as if to go to their tonics by the movement of their bass, but so long as the diatonic succession is retained this is an imitation only. No tonic is reached, but the seventh is satisfactorily resolved by falling to the third of the following triad or seventh. These successions of diatonic sevenths are of a monotonous character, and have gone out of use in great part since the development of chromatic harmony.

The effect of chromaticism is not only to give a welcome relief from monotony, but up to a certain point actually to strengthen the key as a rhythmic whole. This is effected by the semitonal movement to tonic and dominant already noticed. There are, however, certain limits to the carrying out of the semitonal principle to its full extent in harmonic art, because this loosens the bonds of the key, and finally resolves itself into the union of chromatic scales, in which no key and scarcely any consonance can be found to exist. This is an approximation towards Asiatic music, and not a development on the lines of European rhythmitonal art. The evolution of the latter requires the circling rhythm of the key, and that semitonal movement should be made the variation and not the backbone of the actual pitch-material.

The conditions which exist within the key are also applicable to the larger field of the key-circle. This employs no more pitch-material than the single harmonic key (since all tones can be used in it), but involves relations of a more complex character and on a larger scale than any to be found within the limits of one key. These relations imply the passage to subordinate keys with the object of obtaining greater variety than is possible within one key only. This is called modulation, the act of passing from key to key. The actual modulation consists of the chords forming the transit, and this may be abrupt or gradual, according to the number of chords used, the transit ceasing as soon as the new centre is established. The momentary touching of a new key

without resting in it merely suggests or feigns a modulation, since the original key-centre is not actually disturbed.

The key-relations expressed by syntonic and atonic become in the larger field of the key-circle, "centering" and "modulative." Key-relation proceeds upon the already established lines of chord-relation, and the nearest related chords are also the nearest related tonics. The readjustment of chord-relations takes place most easily between nearly related tonics, and those most nearly related are necessarily the keys of the major dominant and subdominant, and the minor submediant, mediant, and supertonic. After these come those tonics possessing one syntonic tone of the central key, but also containing a tone that chromatically contradicts another of these syntonic tones. This contradiction, combined with relation, produces a somewhat chromatic effect, although the terms chromatic and diatonic are distinctive of relations of the scales only, and strictly speaking are not applicable to key-relation.

The relations between minor and major, and minor and minor are less familiar, but proceed upon the same lines. Much, however, depends upon the actual modulation, that is, the manner in which the transit is made, and this is dependent upon chord-relation.

When the key is changed, it is obvious that all pitch-relations must undergo readjustment to a new centre. Such a change would upset tonalitive unity but for the hold made by the original key upon the outline. By means of this "key-hold" all new keys are made relative, involving recognition of ultimate return to the

central key. The foreign tonic will be felt merely as a temporary centre, and unless too long persisted in, the rhythmic key-hold tendency will assert itself and draw the outline back to the original starting point. It is indeed far easier to return to the central key than to remain away from it. Manifold changes of key may take place before the return is made, and it is even possible to establish subordinate central keys during the course of modulation without destroying the key-hold of the original tonic. These complex relations are employed in lengthy compositions, where it becomes necessary to make use of the full resources of the key-circle in order to avoid tonalitive monotony. A large field is thus opened to the composer, and it seems probable that the sense of key-hold is capable of very much greater development. When this has taken place all keys may be brought into recognisable relation with one centre, in the same way as all chords are now united in the key. But this line of development is the direct opposite of the present tendencies to pure chromaticism and the predominance of discord.

# CHAPTER X

## ASIATIC TONALITY

Tonality as applied in the East and West respectively—The relation of the Eastern tonic to the scale-tone—The tonalitive type of the raga—The raga an expression of religious feeling—A type distinct from tune and from mode—Its tonalitive relations—Its practical value—The tonalitive significance of the drone—Hindu notation and analogies with colour.

It has been thought well to complete the definition of the Western key before entering upon the difficult question of Eastern tonality. It is difficult, because it involves to the European a contradiction of his normal mode of musical utterance, a process which may be likened to the endeavour to stand mentally upon one's head. Yet the attitude of the Asiatic towards tonality can be shown to issue logically and inevitably out of his microtonal instinct. The general principle which selects one tone as a centre about which other tones will circle is as universal as the impulse to keep strict time. The difference between Eastern and Western tonality lies in the manner of the application of this principle to the scale. All that has been done hitherto with Asiatic music is the reading into it of the Western application.

It should be observed that the general principle is concerned only with the fact of a tonalitive centre. When applied to consonant conditions this centre becomes for physical reasons the basis of the triad,

hence, naturally enough, the basis of the scale, and thus also the essential tone of the key. It is therefore due to consonance and to consonance only that the centre of the key coincides with the basis of the scale. So much is this fact taken for granted, that the only name for the first degree of the scale is tonic or key-note. The word "scale-tone," meaning a first degree giving its name to the scale apart from the tonic, has never been required in consonant art.

On the other hand, when the tonalitive centre is applied to microtonal and semitonal conditions, it remains simply a centre, for there is nothing to make it a basis. It is recognised, not by consonant relations, but, in the most primitive stage, by the fact of its forming the central tone of three. It is approached and quitted by quarter-tone or semitone from above and below. When the primitive use has vanished into more extended melody these conditions are not invariably retained; other factors, such as frequency, stress, and length of duration, are called in to assist, but the semitonal movement towards the tonic still remains the normal Eastern method of its definition. As has already been shown, this principle has invaded the Western art and become familiar to us in the leading-note of our scale. But we associate it with a tonic already established upon a consonant basis, and it assists only to define further what has been long familiar. Whereas to the Asiatic it forms the essence of tonality, which is to him nothing more than movement about a centre—an airy fabric, it is true, containing little of the solidity and repose of

the consonant basis of harmonic art, but still an expression of the identical tonalitive principle.

To some extent Asiatic tonality comes down to earth in its relations with scale-form. Its tonic still remains a free one, but it assumes definite relations towards the scale. In the Eastern modal system we are brought face to face with a first tone of the scale which is neither a tonic nor a key-note. It is probably the lack of the name that has prevented our recognising the thing, and when we begin to perceive that a scale-tone can exist on its own merits, its connection with tonality follows easily enough. It is not a tonalitive centre, but it is necessarily a basis, because the lowest tone of the scale. And whereas we Europeans unite our tonic and our scale-tone inextricably, the Asiatic keeps his apart, each having its own function. There is nothing final about the Eastern tonic; a melody may circle on around it, and so far as the tonic is concerned there is no particular reason why it should ever leave off. Orientals have a fondness for the circular form of air which repeats itself *ad libitum*, and has no conclusion. At the same time the need for a final tone is recognised, and the scale-tone is used for the purpose. At once a relation is set up between the scale-tone and the tonic, and this opens the door to new developments of relative pitch. The tonic is no longer an independent centre, but becomes a tonic upon a definite degree of the scale, with specially related tones upon other degrees. The key-circle of the Western system, with its two modes only and uniform tonic reproduced at all levels of pitch, is here replaced

not only by many variations of mode, but by variation of the position of the tonic within the mode. This is a thing that lies entirely outside of the normal European experience.[1] But seeing that the Oriental, lacking the consonant intuition, has his attention absorbed by mode-variation, and that this prevents recognition of differing scale-tones, is it likely that he should be anxious to confine his tonic to what is practically a single tone, when all the degrees of the scale are open to him? We might as well confine our music to one key. All music of advanced modal character is conditioned by this development of the moveable tonic, which means the further differentiation of relative pitch as opposed to development on the lines of absolute pitch. It is the normal evolution of a purely melodic art, owing its charm to delicate and subtle inflections of pitch, to which those possessed of the microtonal instinct are naturally susceptible.

The Hindu is nothing if not emotional, and this necessity of music has here assisted in its technical evolution. The formal definition of tonality is made in a melodic type called the *rága*, but even when such an experienced Oriental musician as Raja Sir S. M. Tagore defines this thing, he does so on the lines of its emotional purpose, rather than its technical import. "A *rága* is the succession of notes so arranged as to awaken a certain feeling of the mind." Though consisting now of several hundreds of fixed types, it is considered, fundamentally, to be an emotional utterance.

[1] It must not be confused with the use of modes other than major or minor where the tonic is invariably the scale-tone.

The same can scarcely be said of our key-system, though unavailing efforts have frequently been made to ascribe distinct emotional characteristics to the various keys. The truth appears to be that feeling identifies itself with relative pitch rather than with change of pitch-level. There is distinctly a difference of feeling between major and minor, which is not produced by any transposition of either. The Hindu has taken the line of least resistance, and is thus enabled to express all his feelings in his marvellously elaborate tonalitive scheme. It has been said that everything in the East has arisen out of religious feeling, and such a view is borne out by the direct association of each tonalitive unit of Hindu music with a corresponding unit of Hindu mythology. The ragas and raginis (technically the same thing) are all named after the gods, who brought down music from heaven for the solace of man. The varying emotional characteristics associated with each god or goddess are reflected in the raga, and the peculiar tonalitive type employed falls into its natural place as a means to an end.

In all probability similar systems once existed in Arabia and Persia, but our present knowledge of the raga-type comes solely from the Sanskrit authorities on Indian music and the modern Hindu practice. There exists much confusion in the minds of Europeans as to whether the raga is not a melody, or else simply a scale. Upon the first point we have the following statement: "It is when words are set to a *rága*, and when rhythm (*tála*) is given to it that it can mean a song" (S. M. Tagore). Hindu theory is careful to distinguish, further, between

raga and mode. The latter consists of the actual scale and is called *Thát*, and of these an immense classification exists. The scales which are "mostly in use" are given as follows: Complete modes, 32; sexatonic modes, 113; pentatonic modes, 160—yielding a total of over 300. The retention of the incomplete scales is doubtless due to the fact that they supply, by means of their omissions, certain peculiarities of pitch-relation not to be found in the complete scales, and thus form valuable additions to the modal system considered as material for the raga. The difference between mode and raga may be gathered from the fact that the frets of a stringed instrument must be arranged for any particular mode; once this is done, all the ragas formed upon that mode can be used without alteration of the instrument, but a new mode requires a re-arrangement. As many as thirty ragas may be founded upon a single mode; again there are modes that admit of but one raga. The latter takes its pitch-material from the mode; but what makes it a raga is the distribution of these tones in melodic order according to the tonalitive principle already described. In other respects the raga is unbarred melody, somewhat of the nature of recitative, using time-outline to emphasise its pitch-relations.[1] It consists of four "strains," each a melodic passage of from a dozen to fifty or more beats, with a well-defined rhythm of rise and fall; two strains, however, are all that are usually quoted. When performed, it is sung to meaningless syllables such as *ti*, *re*, *ne*, &c., or played upon an instrument. Its tonic is called *Vádí*

[1] See Appendix, Section P.

(chief), which is described as the *ján*, the life and soul of the raga. This has accessary tones somewhat after the manner of the European dominant and subdominant at the distance of fourth and fifth. Sometimes both are employed, provided they both exist in the mode upon which the raga is founded, and these are called *Samvádís* (the ministers of the *Vádí*). Their relations with the tonic hold good, moreover, when either is chromatically inflected, this being a permanent chromatic inflection of the mode which is necessarily repeated in the raga. Such chromatic relations give a very Oriental character, whereas the diatonic types suggest European tonality in some degree. There are six original ragas, and all other ragas and raginis are formed from these by the process of taking out a few notes here and there from two or more and combining the phrases afresh generally upon a new tonic.

In estimating the value of the raga to the Hindu singer, it must be remembered that, in the East, notation is either non-existent or is unused by the bulk of musicians. These play from memory, or else extemporise, and preferably the latter. Thus the greater part of Eastern music is extemporisation. From this point of view the value of the raga can be appreciated, since it supplies the singer with the essentials of his pitch-outline, certain notes to be made prominent, and certain sequences of notes to be used, varying in ascent and descent; all this is based, not upon calculation, but is the result of centuries of intuitive utterance in music, natural to the race and natural to the singer. Quarter-tones, if not included in

the traditional use, are left to the singer's improvisation, of which freedom he fully avails himself, embroidering his own fancies across the fabric of the raga.

The use of the drone-bass, which is very common throughout the East, is undoubtedly due to a desire for definition of tonality. Its effect will depend, however, upon whether it be used to enforce the scale-tone or the tonic. Instances are quoted of a primitive melody winding itself in semitonal outline about a drone, which must have been the tonic, but in such a case the connection with the scale had not yet appeared. More often the drone enforces the scale-tone, by means of which the intervals of the mode are easily apprehended. Unless, therefore, the tonic is very clearly defined in the melody, the tendency of the drone will be to enforce the scale-tone at the expense of the tonic, and thus by degrees to unite tonic with scale-tone after the European manner. The Hindu theory of music does not recognise the use of the drone as a note continuously sounding, deeming that this would detract from the melodic nature of its music. Of the double drone of first and fifth degrees it is said, "This combination (which is a stranger to Indian Music, and, as a sound, not recognised by it) when tacked occasionally on to a melodic piece would certainly destroy its character as a *Rága*, and would render the whole thing not only *un*-Hindu Music, but a perfect babel of foreign jargon" (S. M. Tagore, "The Musical Scales of the Hindus").

Unfortunately it is impossible to reproduce this Eastern art with any certainty in European notation

owing to our lack of the microtonal interval. The insertion of a "quarter-sharp" conveys little, because it is necessary to be familiar with the use of the thing before its sign will be appreciated. In this respect the Eastern musicians, where a notation exists, have the advantage of us. Though quarter-tones do not now figure in the modal scheme of India, the tuning of which approximates to equal temperament, the theory of them is a recognised part of the Hindu system, and for microtonal intervals Sanskrit names and signs exist which indicate sufficiently the exact pitch-outline to a native ear. In all other respects the present Hindu notation is meagre and unsuggestive in the extreme. It is nothing but the bare notes, and all phrasing and variations of force-outline or tempo are left to the imagination. When one considers, further, the difficulty to a Western ear, prepossessed by ineradicable consonant instinct, of perceiving the bearings of the Eastern tonic at all, even when not confused by quarter-tones, it is clear that Hindu music cannot be readily appreciated by European musicians.

The best general idea that can be given of the art may be found in the analogy with colour. It is a fact that Sanskrit authorities recognised each degree of the scale as relating to a special colour. This is an idea not unfamiliar to Europeans, but where it is attempted literally to combine such colours on the lines of harmonic art, the result is grotesque. On the other hand, in melodic music, where degrees of pitch are recognised only as a needful foundation to be wiped out at will by the *murchana* (movement by s'rutis, which implies

imperceptible intervals), a real analogy with colour does exist. The subtle gradations of colour-tones in nature and in the finest art find their counterpart in the equally subtle shading of the pitch-tones of Oriental music.

# CHAPTER XI

## DISCANT

Mixophonic art — Eastern instrumental accompaniment — Distinction between harmony and discant—The art of organum or discant in early writings—Similarity to primitive Eastern discant—The argument for the Eastern origin of Gregorian chant—Its exotic character —Effect of discant upon the chant.

It must be evident to the most casual observer that, in Asia beyond India, music, though originating like the music of the nearer East in microtonal intervals, has taken a path of its own. Here instead of a profusion of modes, the complete modal type is only beginning to make its appearance; with the exception of Japan, which seems to offer a case of mixed development, each country has but one or two scales, and the five-toned formula with varying intervals for the most part predominates.

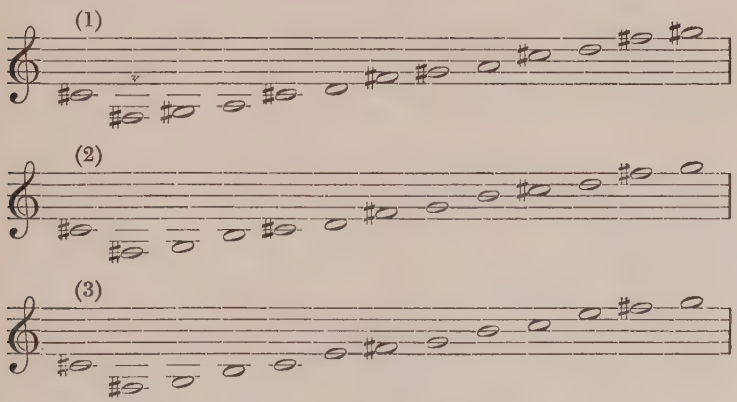
When we find uniformity in one direction we may be tolerably certain that music has made for itself variety in some other line. This is the case with the far-Eastern music, which, instead of remaining a purely melodic art, has sought variety in the combination of moving parts at differing pitch. It has boldly launched forth upon a species of art which may be termed "mixophonic," to distinguish it from the polyphony of the West, which has a harmonic foundation. Its greatest development has been in Siam and Java. It has been described as "a labyrinth of eccentric discant," and is

stated by those familiar with it to be of a very fine effect, the extraordinarily rapid and complex weaving of the parts compensating in great measure for the lack of harmony. It is generally found associated with instruments of the harmonicon type which are tuned as has been explained.[1] In this natural art of discant (*i.e.* the interweaving of non-harmonic parts) is to be found the explanation of the persistence of the pentatonic formula. Tones of differing pitch that are going to be promiscuously mixed up together at the fancy of the performers must be limited in number and well-defined in pitch; no variation upon these is wanted, because the effect desired is mixophonic and not melodic; varied kinds of emotional utterance are obtained by variety in the mixture and not in the melodic succession, as is the case with the Hindu raga. Thus the five tones are long adhered to, and a sixth and seventh are slow in appearing. Since the Siamese and the Javans have no notation of their own, the whole art is purely extempore, and this condition seems to favour its development. In China and Japan, where notation of a sort does exist, but little seems to be known to Europeans of a mixophonic art; but the following statements suggest that something of this kind may be found in Japan: "The Japanese classical music is not melody alone; it is written in four parts, two Kotos, Kokyu (the Japanese fiddle) and Samisen (an instrument resembling the Kokyu, but played with a kind of large wooden plectrum). The Koto parts correspond to our first and second violin parts, the Kokyu reinforcing

[1] See p. 53.

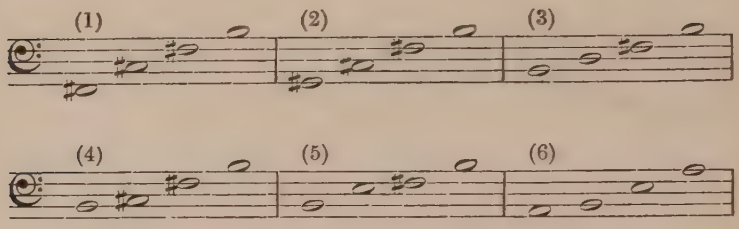
melodic passages. . . . This music is exceedingly complicated, but full of interest; but it is impossible to render it in the West."[1] In Burma the musicians are said to understand counterpoint, but not harmony; this can be nothing else than discant. Even in China accompaniments on the guitar are played for a singer or for a solo guitar, and this appears to suggest discant which is essentially an art of accompanying a melody. We are told of Javanese music: "The theme is the important thing; the parts fall in as they like; the musicians know nothing of score, but only the melody; each adds what he likes; some go up the scale, some go down; they vary the theme or accompany it; they bring rhythmic life and motion into the music."[2]

It is evident also that a tuning was frequently employed in arpeggio, as we should use a chord, for purposes of accompaniment, upon an instrument that like the *koto* has generally but one note to each string. The principal *koto* tunings are as follows (Piggott's "Music of Japan," pp. 92–3):—




[1] E. T. Piggott, "Musical Association." 1891–2.
[2] Dr. J. Groneman, *De Gamelan te Jogjakarta.*

The *biwa*, or balloon-shaped guitar, has the following tunings :—




Tuning No. 3 is not considered to differ in kind from the others. On both these instruments in Japan it is common to sweep the strings backwards and forwards with the plectrum, in arpeggio effect.

Vocal antiphony is also fairly common ; one phrase of melody will be answered by another voice or voices with a slightly differing phrase ; the answer may take the form of a transposition to the fifth above, and the two voices will frequently overlap one another, but there is no trace of harmony in the sense of chord-conception. Since certain writers have been led by the discovery of occasional thirds or sixths in Eastern discant to attribute to Orientals a knowledge at least of the elements of harmony, it is well to state that no such thing as harmony in the European sense, or even a rudimentary conception of it, exists in Asia. The Easterns have no chord-sense, and do not like chords when they hear them.[1] The mistake has arisen through lack of knowledge of the distinction between

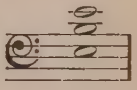
[1] It is said that the late Shah of Persia, when in London, sat bored and gloomy through the first act of an opera. When the orchestra began tuning up for the second act, his face brightened, and he asked for an encore.

harmony and discant, which are entirely separate things.

Discant originates in variations of vocal compass, for which consecutive octaves, fifths, and fourths are the most convenient intervals.[1] Later a desire for independent movement of voices makes some rise while others fall, which movement is known as contrary motion. This, when fully developed with a great number of moving parts, is absolutely incompatible with harmony. What we term counterpoint in its historical sense forms the only compromise that has ever been made between the two; both were cramped in the union, and neither harmony nor discant could fully develop itself. It is perhaps a new idea to European musicians that it is possible to create a form of art which unites tones of differing pitch simultaneously that are devoid of consecutive consonant relations, and they are still less aware that such an art has existed, no man knows how long, in the East. To describe this music as purely dissonant would create a false impression, for, strictly speaking, dissonance implies a feeling for a consonant basis upon which it forms a variation. Where a scale only forms the pitch-standard, there is no appreciable consonant basis, and the music is simply of a non-consonant character. It is true that consonant intervals will occasionally be found in it, because in a synchronous pitch-outline it would be difficult altogether

[1] In the Buddhistic service in China each chanter sings at the pitch most convenient to his own voice, though all sing the same words in the same time.

*below*. Thus the carrying out of the first species becomes impossible, and the organum in fourths is not carried on throughout. The writer concludes: "It sometimes happens that, when the natural kinds are deficient, we make an irregular organum by bringing together the third and the second in some parts."

The nature of the early organum is now quite clear, and the description agrees with the earliest written examples. Its similarity to the primitive usage of Eastern discant is almost too obvious to need pointing out. In the Andaman Islands the inhabitants—men, women, and children—sing thus in three parts 

the parts rising and falling simultaneously by quarter-tones in consecutive fourths and fifths. When the organum advanced to three parts these were its precise intervals. Further, it was not considered necessary to end on the so-called final tone, a second above or below answering the purpose as well, and, what is even more hopelessly opposed to harmonic ideas, the voices might end on the interval of the second. Why the "natural kinds" should be "deficient" does not appear, seeing that these are presumably consecutive fourths of which no lack usually exists, but it is at any rate clear that the regular organum was in fourths with a possible variation on the last interval, and also that when thirds or seconds were used in the course of the organum it was considered to be irregular. The fourth is here the chosen interval, and the second and third are for occasional use as we may use discords,

preference being given to the second. Dr. Riemann has laid stress upon the origin of the organum in the fourth instead of the fifth, but from our point of view this is immaterial, seeing that both intervals are dissonant in consecutive use, and are used equally often in mixophonic art. As previously observed, the early use of the pedal is practically universal, and implies no harmonic sense whatever unless accompanied by actual chords.

It may now be asked, granted the similarity between the organum and Eastern discant, how is the appearance of such an art to be accounted for in the monasteries of Western Europe? Doubtless the main reason for it was the nature of the single chant upon which the organum was formed. This chant, called Gregorian (because it was chiefly systematised by St. Gregory, who flourished in the sixth century), is now generally admitted to be of Greek origin.[1] The Asiatic nature of Greek music is less understood, because so little has been known of Eastern musical usage; but when we come to examine what is known of the Greek art with a view to discovering whether it is European or Asiatic, no doubt can exist upon the matter. Two of the Greek tetrachords, those known as the enharmonic and the old Olympus, are dissonant pentatonic types; the music was entirely melodic and founded upon modes to which emotional characteristics were attached; the Greeks, like the Hindus, were intensely sensitive

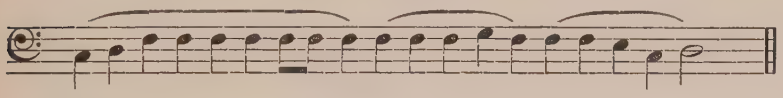
[1] "There seems no reason to doubt that the music used in the early Christian ritual was of Greek origin." (Sir H. Parry, "Art of Music," chap. iv.)

to the emotional properties of melodic inflection, and desired nothing beyond that. In addition to this there is so marked a resemblance between the ancient Vedic hymns of the Hindus, Buddhist chants, and the Gregorian chant of Europe, as to leave little room for doubt that they have had a common origin. The practice of antiphonal singing also came from the East and is said to have been brought into the Western Church by St. Ambrose, who was the first ecclesiastic known to have concerned himself with church-singing.

The nature of the Gregorian chant itself is that of Eastern and not of Western melody. It exhibits a tonalitive development founded upon relative rather than absolute pitch, and its tonality is identical in principle with the Hindu raga. That this tonality has never been rightly explained is due, as in the case of the Eastern art, to the reading into it of the normal Western experience. The fact that we recognise a tonic upon the scale-tone only, or that the true tonic of the Gregorian system was otherwise named, accounts for its previous lack of recognition. It has perhaps not occurred to us to ask why the name "dominant" should be given to the fifth degree of our scale and not to the key-note. In Gregorian tonality is found the answer. Each of its modes had what was called a dominant and a final. The latter was the scale-tone, but not the tonic; the former varied in position between one mode and another, and was so named (like the Hindu *Vádí*, the ruler) because it *dominated* all the other tones. Since in five modes out of twelve it occurred upon the fifth of

the scale, the name passed on into rhythmitonal art attached to this degree, regardless of the fact that it is now no longer the dominant which dominates, but the tonic. The true function of the Gregorian "dominant" has thus been hidden; it is, in fact, the tonic; not in the sense of a consonant key-note which had in Gregorian chant no more existence than in the Hindu raga, but considered as the central tone about which the rest circle. An example of Gregorian chant will make this clear.

MODE II. TONIC F. FINAL OR SCALE-TONE D.



The resemblance of this chant to a raga is too striking to be overlooked. It differs only in its extreme tonalitive simplicity. In Asiatic tonality, as in European, an advanced stage like the raga-type has no call to emphasise its tonic overmuch. This chant is of great interest as showing a very primitive stage of Eastern tonality, when it was necessary to dwell much on the tonic in order to distinguish it. To this tone the voice clings, scarcely moving to another until it reaches the cadence at the end. Doubtless the natural fall of the voice suggested what was later stereotyped into a final, or scale-tone, when the modes had become established. These differed only from the Oriental mode by being more limited in material and associated with a fixed absolute pitch. For this the use of the organ probably accounts, and

Dr. Riemann's suggestion that the name organum was thence derived, seems a likely hypothesis, this instrument having been introduced into churches for use in the choral service by Pope Vitalianus as early as the latter half of the seventh century.[1] To each of their modes the early church-musicians ascribed distinct emotional characteristics after the manner of the Greeks and Hindus, and as we have shown such emotional utterance was the essential underlying idea of the Asiatic system.[2]

Taking all the above-mentioned facts into consideration there seems no reason to doubt that early Western church-music was an importation of the Asiatic form of the art bereft of its especially microtonal character, but otherwise differing but little from what is now, and doubtless was then, in use in the East. Semitones, of course, there had to be, and to these the youthful Western ears did not take kindly. So difficult was it found to hit precisely the position of these intervals, that before the invention by Guido d'Arezzo in the eleventh century of a set of sol-fa names to indicate

[1] Hawkins, "History of Music," chap. xxxii.

[2] The eight Gregorian modes (called tones) are divided into "authentic" and "plagal," the latter having a different tonic and an extension of compass below the scale-tone. The large capitals indicate the tonics, the small ones are the scale-tones.

| *Authentic.* | *Plagal.* |
|---|---|
| 1. D e f g A b c d | 2. a b c D e F g a |
| 3. E f g a b C d e | 4. b c d E f g A b |
| 5. F g a b C d e f | 6. c d e F g A b c |
| 7. G a b c D e f g | 8. d e f G a b C d |

Four other modes of a similar nature were added later. To all these modes Greek names were misapplied. They must not be confused with the semi-harmonic scales of European tonality which have a key-note. See p. 78.

relative pitch, it took pupils ten years to learn to sing the chant correctly. The art was, of course, an exotic, but it harmonised with the ritual, and great pains were taken to preserve it, and to protect it from becoming contaminated by the native-born music of the people. This necessity entirely explains the attitude of the Church towards popular song. Unless the door had been shut and barred upon folk-music, church-song would not have had a chance of survival. It also explains the atmosphere of rule and hide-bound tradition which surrounded Gregorian chant. This served the purpose of the dykes which in Holland keep out the sea. But in spite of all that authority can do, human nature cannot be made to stand still, however much its movement may be retarded. Throughout these early centuries, and on into later ones, there meets us a perennial stream of bitter complaints against the levity, the inattention to rule, the stupidity and ignorance of the singers of the chant. Meanwhile the real point at issue was that the authorities desired conformity, and the singers, being human, desired variety and proceeded to make it. Thus Guido, in his *Micrologos:* "Neither is there any uniformity of music at this day in the churches; for there are as many kinds of antiphons as there are masters; insomuch that no one can say, as heretofore, this is the antiphon of Gregory, or Leo, or Albert, or any other; *but every one either varies these, or forms others at his pleasure.* I ought not, therefore, to give offence if I contend with the corruptions of the times, and endeavour to render the practice of music conformable to the rules of art; and as *all these*

*corruptions have arisen from the ignorance of musicians*, I must earnestly request that no one will presume to make antiphons, unless he be well skilled in the art of forming them according to the known and established rules of music; it being most certain that he who is not the disciple of truth will be a teacher of error."

This statement recalls Canute by the seashore, and it becomes apparent that Guido and his successors, whatever their contributions to notation, instead of being the innovators we have been led to imagine, did all in their power to hinder the normal development of the art. This attitude of Guido's has been the attitude of the professional musician of all ages, with or without the authority of the Church behind him, the holding up of an abstract musical form which is the canon of the art and cannot be bettered, but is corrupted by the ignorance of musicians. It is, in truth, this blessed "ignorance of musicians" that has given us our modern art, but still the orthodox hold up their form of abstract beauty and their canon of laws.

Had the Church succeeded in preserving intact her musical tradition, there would have been a very different history of European music to chronicle. As it was, in the end the singers conquered and the sea came in; and the first little hole in the dyke proved to be the organum, or, as it soon came to be called—discant.[1]

[1] "So long as Gregorian chant, the pure choral song, was rendered in unison, it is well established that none other but the fixed tones of each Church mode, according to the strict diatonic system, were adopted; as soon, however, as they commenced to sing in parts, the difficulties of a strict diatonic chant began to be felt, and it had to seek the assistance of medium tones" (*i.e.* sharps and flats which opened the door to popular tonality). (Ambros, *Geschichte der Musik*, vol. ii. p. 155.)

# CHAPTER XII

## COUNTERPOINT *VERSUS* CHORD-CONCEPTION

Discant an extempore art—The dissonant standard—Effect of the folk-music—Laws and practice of discant—Introduction of the consonant basis into musical theory, and consequent definition of discords—Counterpoint, the science of intervals—Lack of chord-conception in musical treatises of sixteenth and seventeenth centuries—Rameau's chord-theory—Effect upon the science of intervals—Welsh chord-conception of the twelfth century—Free counterpoint in education.

"THE name of descant," says Morley, "is usurped of the Musicians in divers significations," and it were well for the theory of music if there had been no other names subjected to a like "usurpation." Actually, the word discant was used largely in place of counterpoint in general down to the close of the seventeenth century, but Morley agrees "that when a man talketh of a Descanter, it must be understood of one that can, extempore, sing a part upon a plaine song." He gives his opinion of this practice as follows: "As for singing upon a plain-song, it hath byn in times past in England (as every man knoweth), and is at this day in other places the greatest part of the usual musicke which in any churches is sung, which indeed causeth one to marvel how men acquainted with musicke can delight to hear such confusion, as of force must be among so many singing extempore. But some have stood in an opinion, which to me seemeth not very probable, that is that men accustomed to descanting will sing together

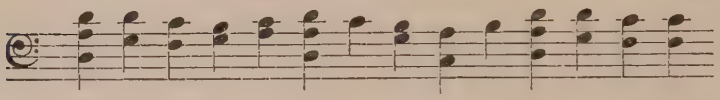
upon a plain song without singing eyther false chords, or forbidden descant one to another, which till I see I will even think unpossible."

The rules to which Morley refers were those of strict counterpoint, and as far as these rules were concerned he was doubtless right in his opinion. But discant existed long before these rules had been thought of, and at a very early period it appears to have grown out of the organum, which it finally superseded. It was from the beginning an extempore art, and therefore little direct information is to be obtained about it. In the childhood of notation, when but few can record music, and that only imperfectly, there will not be much more than a backwater of the main stream of musical art in the written music. As in the East now, the life of the art will be found in extemporisation. The imperfect technique of the record limits what can be written, and acts as a dead weight upon the natural advance of the art. Directly then that any addition to the Gregorian or plain chant in the shape of a second part was recognised, the singers had the matter practically in their hands. Later there came the division into Pricked song and Plain song, the former being all written out, the latter having merely one part written, its *cantus firmus*, as the chant came to be called. But at the beginning it must have gone much at the will of the singer. Then synchronous intervals began to be classed and chosen for the organum, and these chosen ones were from our point of view all dissonant. Guido mentions the semitone and the full-tone with the fourth and fifth as the perfect concords.

This merely meant that they were considered the normal intervals, and this upside-down view of music was due to the dissonant character of the early church art. One could as soon expect to gather figs of thistles as to look for Gregorian chant to bring forth a love for thirds. It may have been that early discant was as dissonant as its Eastern relative, but there was this difference that the question of the properties of intervals came early under notice, and continued matter for discussion for centuries, whereas in the East one synchronous interval is as good as another, and no one troubles how they are mixed up. We cannot know, however, how much attention the singers paid to the theorists —to judge from the complaints it must have been very little—and therefore in the actual extemporisations nature may have claimed her own, and insisted upon the real consonances of thirds and sixths sooner than we think. The so-called *faux-bourdon*, a succession of first inversions of triads, was, we know, an early innovation, which yet did not affect the written organum. And in course of time certain daring spirits ventured to take popular songs, add parts to them after the manner of the people's singing, and actually write them down, with the addition of the words of a Latin hymn to lend an odour of sanctity to the proceeding. That this was not a practice that commended itself to the authorities is shown, however, in the fact that but one specimen has been allowed to survive, our famous English round, "Summer is i-cumen in."[1] But for it, we should not have known that in the thirteenth century

[1] See Appendix, Section J.

any monk would have dared to study the folk-music and bring it within the four walls of a monastery. It is a significant fact that the very MS. of Reading, in which this round is written, contains church-music, of which the following is an extract, written originally upon a fourteen-lined stave in two C and one F clefs:—




Clearly organum has not in the course of five centuries progressed very far, but it has advanced to the inclusion of two thirds in succession, and even of a sixth, innovations doubtless due to the singers. And this, be it remembered, was the orthodox art of music in the thirteenth century, the *summum bonum* of truth and beauty, while our fascinating native round resulted from the levity and disorder of ignorant musicians, who would not rest content with the law as handed down to them, but preferred, in Guido's words, to be considered "teachers of error" rather than "disciples of truth."

In the course of the next century, however, the pendulum at last swung round, consecutive fourths, fifths, and octaves were forbidden, thirds and sixths were freely admitted, but the theoretical position was saved from utter apostasy by the retention of the former set of intervals as nominal concords, which were "perfect" in opposition to the "imperfect" third and sixth, a distinction which has survived to the present day. The important point, however, was gained; the

*use* of these intervals was now by law exactly the reverse of what it had previously been, and the distinction made accorded with consonant feeling; the name mattered therefore very little. At this time the natural discords of the seventh and second began also to be classed as such.

The earliest account of actual discant as distinguished from written music appears to be the one given in the Cotton MS., circa 1326, and quoted by Hawkins.[1] From this it appears that four or five were accustomed to sing upon a *canto fermo*, and that the best effect was obtained when only one actually descanted, and the others varied the melody. The descanter was to use "only the imperfect concords, namely, the third, sixth, and tenth, and proceed by these ascending and descending, as to him shall seem most expedient and pleasing to the ear." But the others, whose duty it was to "break and flower the notes in such a manner as best to grace the melody," performed this pleasing task in the octave or twelfth above, which savours strongly of mixophonic art, and as regards the opening and closing tones the reign of the fifth still continued.[2] If all descanted, however, *i.e.* sang in parts distinct from the *canto fermo*, the use of consecutives was forbidden. It is curious that this same distinction prevailed even down to the close of the seventeenth century, when the true discant, the extempore art, had become confined to "breaking or

[1] This MS. was destroyed by fire at Ashburnham House in 1731, but had been previously copied for Dr. Pepusch.

[2] The custom of closing without the third was not entirely extinct in Palestrina's time, even he occasionally making use of it.

flowering" the melody, and was known as divisions on a ground. The ground was a theme of the *canto fermo* type played upon a harpsichord, and the descanter, now a viol-player, improvised variations of the ground simultaneously with it. These were called divisions, because the long notes of the theme were divided up into many small ones. Christopher Sympson, in his "Division Viol," has left some interesting examples for the use of learners of an art which was practically independent of and completely died out with the development of harmony. When any of these examples of this last surviving use of European discant are performed nowadays, a harmonic accompaniment is perforce added to satisfy modern ears, thus practically destroying the original effect.

Returning to the written art, we find that from the fourteenth century onwards the theoretical position departs further and further from its original standard, until at length discords and concords respectively begin to assume somewhat of their modern significance. The foundation of the art has swung round from dissonant to consonant theory, but it is hampered by the Eastern character of its chant, which forms still the actual basis of composition. The composer added parts to a *canto fermo* very much as the descanters may have done, if with more learning and discretion. When a folk-tune was taken for theme, it was made into the same type of melody by unlimited elongation of its notes till all its original time-relations had disappeared, and it became indistinguishable from the chant. The habit of centuries could not be laid aside.

The use of discords now became clearly defined. Dissonant intervals might occur (1) through the filling up of the melodic third or fourth by scale-form (passing-notes); or (2) one note of a concord might be held on while the other moved so as to make dissonance with it until the first one moved also, and the interval of the two notes was again consonant. This was by the Elizabethans known as "binding," but is now called suspension, because the first note hangs over the other until it is resolved. The exact intervals that might be taken in this way were limited by the rules.

These two types of melodic discord, since further stereotyped into the five species of counterpoint, were in use during the whole Catholic Church period, hedged about with rules that have not yet ceased to exist, although they are entirely inapplicable to rhythmitonal art. Their importance consisted in the fact that the music for which they were invented was devoid of definite tonalitive movement. As it became harmonic, this music lost its original Asiatic tonality without fully acquiring the European style. Hence it had no succession of keys, nor any defined movement within a key, and to us it appears a vague wandering amongst tones, perhaps pleasing, perhaps disconcerting by its unexpectedness, but its effect upon contemporary ears is impossible for us to imagine. Clearly the only pitch-relations then recognised were the intervals of consonance rather than the tonic standard, and it was most important that consonant intervals should be paramount. Hence the severity of the rules regulating the use of the most inoffensive and

fleeting of discords. Counterpoint was, in short, the science of intervals. Interval was added to interval according to laws that are in force at the present day, but what the sum of these intervals amounted to was theoretically no concern of the composer's. One fancies that minds, taxed to the uttermost by the intricacies of this science, must have literally refused to grasp any conception beyond it. It is a commonplace to say that musical form was then regarded horizontally, and is now seen to have a vertical significance, but how many of us have ever considered what this trite statement really involves? Perhaps some idea of it may be gained by an analogy. Imagine a language confined theoretically to syllabic use. For centuries words have been spoken and sentences formed, but nobody has the remotest idea that such a thing as a word exists, much less a sentence. Every one thinks in syllables, and mentally adds syllable to syllable, according to fixed and innumerable rules, in order to make himself understood. Multiply the intricacy of this syllabic use tenfold as a low estimate, and some idea may be gained of the nature of musical theory before chords were discovered.

Attention has previously been drawn to the marvellous intuitive capacity of the musical mind, which is able to produce what it is unable to understand. It revels in the sheer delight of hearing what it has no intellectual equivalent to describe, and so all-sufficing is it to hear that there is often no room for thought, or else the thought is focussed on to another part of the subject. Let those who doubt the truth of this assertion explain if

they can the historical fact that no more exquisite or grander chord-successions exist than those which were formed before composers generally had the faintest intellectual conception of what a chord was. For sheer harmonic beauty no modern music can surpass the *Missa Papæ Marcelli* or the B Minor Mass, compositions which, though theoretically contrapuntal, owe all their emotional effect to their essential harmonic basis, originally unobserved. To us who think in chords as if by nature, it is impossible to realise the theory of music without them, but that chord-theory was at this time unknown is an incontestable fact. The practical treatises of music of the sixteenth and seventeenth century form amazing reading, not so much for what they contain, as for what they omit. Here one gropes in the dark, and can scarcely realise that this is all the theory there was. Yet Morley's "Plaine and Easie Introduction," and Sympson's "Compendium," and Playford's "Introduction to the Skill of Music," are no dry-as-dust tomes, but works of practical musicianship, delightful in style, and presenting the whole theory of music as it then was, works which ran through many editions and formed the educational classics of their day. Playford's book continued to be reprinted almost down to the publication of Rameau's first Harmony Treatise in 1722. Sympson's was actually reprinted in 1727. Those who wish to appreciate the flood of light let in upon musical theory by the greatest theoretical genius of music cannot do better than study Playford and Rameau side by side. For those who are unacquainted with these works it

may be said that for Playford and his contemporaries a chord (spelt cord) was merely an interval, or a string, or a tuning, "common chords" were the third, fifth, and eighth, harmony was a general term for counterpoint, key was the first note of the scale or perhaps any single note, no key-system was recognised, modulation was unknown and the scale of G with the minor seventh was held to be the foundation of music. We wander through utterly strange and devious mazes of mi in B, mi in E, &c., and approach something like familiar ground only when discant, *i.e.* counterpoint, is reached.[1]

Opening Rameau's treatise, on the other hand, all looks familiar, we are at once at home. Some of our old friends appear with different names, but it is evident that here is the model for all the harmony books that have since been written. Here at one stroke appear the major scale, chords consonant and dissonant with their inversions, the fundamental bass as distinguished from the real bass (an absolutely new idea), keys, major and minor modes, cadences,

[1] It is important for the understanding of this subject to realise that down until 1720, or thereabouts, the word chord (*accord, accordo*) had nothing of its present significance. This point is overlooked by Dr. Riemann in his "History of Musical Theory," where he traces the English term "common chord," meaning the triad, back to Godfrey Keller's "Treatise of General Bass," 1707. In this very treatise we are told: "By chords is meant either concords or discords, by semitone is meant half-notes. . . . Common chords are the third, fifth, and eighth." *Trias harmonica* is the only theoretical term that signified a chord prior to this, and this term appears once or twice in German treatises of the seventeenth century and in Brossard's Dictionary, 1703, but not (so far as I am aware) in any English work. Of principles of chord-relation there is no hint before Rameau's treatise. Bach indicated the chord-successions that occur occasionally in his instrumental works, inserted somewhat after the manner of a cadenza or recitative, by the term *arpeggio legata*.

modulation, and practically all the paraphernalia of modern harmony. Further than this, in his famous saying, "la Melodie nait de l'Harmonie," Rameau suggested the evolutionary origin of European melody, and also showed that he perceived clearly the rhythmic principle of tonality. The following is a literal translation from the *Traité de l'Harmonie:* "The principle of Harmony does not consist only in the perfect chord from which is formed that of the seventh, but even more precisely in the fundamental sound and those according with it, which is so to speak the harmonic Centre to which all the other sounds ought to relate. . . . It is not enough to perceive that all chords and their differing factors draw their origin from the Perfect chord and from that of the Seventh; we must observe further that all the factors of these depend absolutely on this harmonic centre and its progression; the Intervals of which they are composed are only such as they are by relation to this centre." In view of this clear statement of the central fact of tonality (even to-day to a great extent ignored educationally), Burney's superficial criticism of the value of Rameau's theoretical work shows only that Burney himself was no theorist.

Attracting at first no particular attention, the world being satisfied with what it had already in the way of musical theory, Rameau's treatise soon sprang into fame, and by the later decades of the eighteenth century a host of imitators and commentators had arisen, English, French, German, Italian.

Everybody was discussing if not writing harmonic theory; the old science of intervals took a back seat except where it served as the foundation of the new theory. Even its most ardent supporters saw the necessity of reversing what appeared to be the natural order, and making harmony and not counterpoint the basis of musical education. It cannot have been mere coincidence that led to the destruction of the ancient contrapuntal style at the very moment when these new harmonic ideas had penetrated men's minds. It is evident that the time was ripe, and that it needed only this intellectual stimulus to sweep away the last of the old church-formulas, and set the theory of consonant music on its natural footing. The death of Bach in itself was insufficient to bring this about. Contrapuntal art had no higher to climb, but it would have continued much longer to dominate musical thought but for Rameau's new theories. It has already been observed that true intellectual understanding cannot generate inspiration, though false intellectual concepts will dam it back. The sudden and rapid development of music from that time was due, in the first instance, to the fact that people were thinking in chords instead of in intervals.

There can be little doubt that had European music gone its own natural way from the beginning, without interference by a church-imposed Asiatic form of the art, that the chord-conception would have arrived at a comparatively early period. In fact, there is proof that it had arrived in Wales in the days of Gruffydd

ab Cynan, 1100 A.D. According to a MS. of the sixteenth century, copied from the original one in Welsh which has disappeared, the measures of music were tabulated by order of the above-mentioned prince. These measures are nothing else than systematic repetitions of two chords, tonic and dominant (or the leading-note triad), and to prove that they were recognised as chords, a shorthand notation exists for them in the following signs: 1.0. or $\frac{K}{i}\,\frac{+}{i}$. Thus one measure was indicated as follows: 1.1.0.0.1.1.1.1., meaning two tonic chords, two dominant, and then four of the tonic. The chords are fully written out in barred letter notation, so many chords to each bar, and the measure given above the piece exactly corresponds with the actual music.[1] It was a crude attempt at rhythmitonal art, and anything more different from the cultivated music of Europe down to the close of the seventeenth century could scarcely be imagined. It is impossible to place this music at a later date than the twelfth or the early thirteenth century, because it must have belonged to the independent period of Welsh art, and by Edward the First the bards were put down and the national music was to a great extent destroyed. The whole theory of it vanished from that time.

From this general historical survey it should now be evident that pitch-outline must be studied from the natural harmonic basis of music and not, as is usual, from the narrow and arbitrary one of contrapuntal art mixed up with harmony. To some extent the greater

[1] See Appendix, Sections L and M.

natural style contains the less, but the most characteristic effects of the latter were obtained by its isolation, and were due to its narrow outlook. These effects will always be of interest to mature musicians, but they are not for the study of students until the rhythmic feeling has been awakened and a knowledge of rhythmitonal music has first been acquired.

It must not be supposed, however, that by the rejection of the antiquated system of mediæval counterpoint is meant that there is nothing left of pitch-outline to be taught but harmony. The practice of composers has long departed from mediæval custom, and in order to explain their procedure a subject called free counterpoint has been invented to succeed the original study. It follows naturally that the laws laid down in the first counterpoint are broken or ignored by the second. In Germany the bonds of the primitive study have already been relaxed, while still in England we halt between two opinions. But though free counterpoint is more to be desired than strict, it is not from the point of view of rhythmitonal evolution a satisfactory presentment of pitch-outline. It starts from the assumption that pitch is the essential factor in music, and thus repeats the mediæval illusion. It is, in fact, a hybrid, neither ancient nor modern. Yet by this means the word counterpoint has found its way into modern music, an unfortunate occurrence, because when once extended beyond the interval system it becomes a loose term incapable of clear definition that can be made to mean anything in pitch-outline

except simple chord-movement or a melody. In order to clear up this confusion, it will be necessary to confine the word counterpoint to its original meaning, and find some other term to signify the pitch-outline of the rhythmitonal art which implies a chord-conception. The word "polyphonic" is already in use as a synonym for counterpoint. But since it is manifestly unreasonable to employ two terms indiscriminately for two differing styles each of which requires a name to itself, in this work polyphony will signify the development of natural harmonic usage and counterpoint the conventional system.

# PART II

## RHYTHM

## CHAPTER I

### GENERAL PRINCIPLES

Rhythm the underlying unity of musical form—Recurrence of units—Strict and free rhythm—The law of union—A relative balance—The standard units—Alternation—The three main divisions of rhythm—The free unit of the idea—The idiom—Rhythm of pitch—Limitations of pitch as a factor of evolution—The under-emphasis or over-emphasis of the key—The rhythmic significance of tonality—Undulating rhythm—Need for rhythmic balance—Rhythm in education.

Musical form consists of a combination of varied rhythmic movements conveyed by means of the tone-material already described; these are all grouped under the central principle of rhythm.

At first sight it may appear unlikely that all the widely differing factors of music should have anything of importance in common; the object of intellectual study of an art, however, is precisely to discover those underlying features of unity which exist in all art, disguised by superficial variations. If no similarity existed between the various parts of a composition, it would not fulfil the conditions necessary to a work of art, which require relation of all the parts to the whole. The general features of art are variety of appearance combined with unity of

principle. This unity is necessarily the rhythmic principle, and when its various manifestations in tone have been grasped both severally and as a whole, it will become easy to understand on general lines the development of the art of music, and to explain why and how one style differs from another. All, in short, depends upon the relative proportions assumed by the various factors in the sum of the whole, and when a new style arises, it means that a new relative proportion has been intuitively discovered. An examination of detail is necessary, not as an end in itself, but as a means of classifying the various parts of musical form into their right places with regard to one another, and thus building up a conception of the whole from study of the parts.

The essential fact of rhythm is its periodicity or recurrence. The understanding of musical form resolves itself into a knowledge of the units or points of recurrence and their combinations.

It is to be noted that the rhythmic principle as a whole makes invariably for orderly arrangement of material. Whatever be the nature of the unit, the fact of periodicity enables us to perceive an intelligible order, which is the basis of unity in art. This order, in music usually called "form," is in the early stages of a very simple and obvious nature. The material then available for use is very small, the units recur at frequent and generally at regular intervals, the rhythmic relations are thus very much all alike, and may therefore be described as strict, or exactly symmetrical. In course of time this strict

form, which at first satisfied, begins to appear monotonous, and variety is desired. It is a fact that monotony of any kind soon ceases to command attention; instinctively the mind wanders in search of variety, and variety in art comes in not as a new and unrelated thing, but as part of the rhythmic order, a varying of what is already in existence. Thus is produced "free" form, which is essential to the progress of any art, and perhaps especially of the art of music.

The general relations of strict and free form have given rise to the fundamental law of musical evolution.

The law of the union of strict and free form is that the strict or exact reiteration shall be clearly perceptible through the inexact reiterations of free form.

The function of free form is here to oppose and vary the exactness of strict form. If the strict form be too obvious, the result is monotony, especially after the first hearing. If free form overpower strict, rhythmic feeling is unable to grasp the reiteration, and hence the music will appear incoherent. A balance is required that shall avoid monotony on the one hand and incoherence on the other. It is evident, however, that to a mind undeveloped in rhythmic perception, reiterations may be obscure that to the trained mind are perfectly obvious. The balance is thus a relative matter that varies with period, nationality, and culture, and may also differ with individuals. The general lines of development, however, indicate a progress from strict to free. The strict is the earlier stage, unless, as

has frequently happened, it appears as the result of an artificial development or of degeneration.

There exists, however, necessarily a certain portion of standard outline (*i.e.* exact reiteration) that is indispensable, since, unless it is clearly perceptible, music will appear without form and void. This standard outline consists of standard units of exact recurrence, of a permanent and unalterable nature, the basis of the art. These standard units are independent of the individual composer, and are due to racial evolution. The *rate* of their recurrence, however, is, within certain general limits, at the composer's option. They are considered as the tone-material of music, and have been so described in the former part of this work.

The principle of alternation of factors which enters into rhythm is sometimes mistaken for the essence of its nature. It is obvious, however, that alternation implies the existence of two units, and of two units only. Whereas rhythm certainly exists in the recurrence of one single unit, such as a blow regularly repeated, and equally in the recurrence of several factors in succession, or in the opposition of one factor to several others of varying nature which must be regarded as single units. In none of these can alternation be said to exist. It is clear, therefore, that alternation is not the rhythmic principle, but that it constitutes an occasional condition of rhythm. It forms the stage of the recurrence of two units which follows upon the earlier stage of the recurrence of one only, and is merged into the reiteration of several units variously combined.

The nature of rhythm may now be defined as "the periodic quality, pulsative, circling, or undulating, of all movement."

These three essential characteristics of rhythmic motion, beats, circles, and waves, are all to be found in music. Although it is their combination that produces the sum of musical effect, each has its own development apart from the others. Musical rhythm, therefore, divides naturally into three great branches: the pulsative, or beating rhythm, the circling, or centering rhythm, and the undulating, or wave-rhythm. Of these pulsative rhythm naturally has precedence, being the primary source of the art.

The union of strict and free form is to be found in both pulsative and circling rhythms; the first has produced the time-system of music, the second that arrangement of pitch-outline called tonality, which refers all pitch-relations to the tonic centre. The third, or undulating rhythm, has a movement to be found in all the outlines, culminating in the climaxes of great musical works. This wave-movement is independent of strict form, having a naturally free irregular character, suggestive of the waves of the sea. The recurring wave is necessarily of a less definite character than the recurring beat or chord; it has, strictly speaking, no incisive point of reiteration, but presents a general condition of recurrence of a former state. To this cause is due its independence of strict form. It may therefore be called free rhythm.

The thing that appears to differentiate music from

all the other arts is that its standard material, however indispensable, is yet neither the whole nor even the most important part of the material to be found in all great musical works. It seems to exist solely for the purpose of rendering this other material aid and giving it prominence. It is this other material which is the essence of music, and alone determines the value and the character of a work. We are speaking of the material which is created by the composer, and generally known as the musical idea. This consists technically of a few notes, with or without harmony, which, if it be an important initiative idea, will certainly contain some striking feature in its time-outline, which will arrest attention, and form a unit of recurrence. The whole idea may lie in this unit, or it may eventually be broken up, forming various differing units which will appear in succession.

In both the providing of this material and the manner of its use the composer has an absolutely free hand. But he cannot escape from his own rhythmic nature. Whatever material he use, where and how he employ it, *he must reiterate it.* This is the essential condition of all musical form, cultured or primitive. The sole difference consists in the number of units employed and the manner of their reiteration. Strict reiteration is exact repetition, and this need only exist in the familiar standard part of the material. The time-beat, the bar, the chord, the key must be exactly repeated, or there will be nothing by which to recognise them; thus we

get exact time and exact pitch in music. But there is no occasion to reiterate the idea strictly; indeed the whole charm of music consists in its free reiteration. At the same time the idea exists in strict form as well as free, and has therefore definite relations to the standard outline, which will presently be entered into.

The idea is technically analysable into the time-figure and the pitch-figure, which form the units of recurrence. This essential reiterative outline of music has been hitherto unnamed, except by the vague term of "development," which conveys no specific idea of its nature. It is here named the "idiom" of music; the recurrent time-figure produces time-idiom, the recurrent pitch-figure, pitch-idiom, and both of these are included under the general heading of idiomatic outline.

This subject is the most important one in the whole range of questions relating to music, and it is the one that is also most commonly neglected. Perhaps its vast range has deterred writers from seeking to give any account of it. It is the one effect in music that owes everything to individual genius. Effects of colour, of harmony, of force-outline, lie ready to hand and can easily be tabulated, whereas the idiom springs as a new creation from the composer's brain, and presents in the case of each great master and to some extent in each of his works a new variety. It is time-outline that leads to pitch, and therefore in order to understand the construction of rhythmitonal art, first we must examine the units of its time-outline. For here is revealed the

organic nature of the idiom in its most vital usage, which is to be found in all great instrumental music from Haydn downwards, whether its basis be called absolute, poetic, or dramatic.

When we turn to review units of pitch, the complexity of music is nowhere more apparent. The actual number of combinations employed is enormous when compared with those of time. The key-unit divides into numerous chord-entities, whose complicated relations contrast strangely with the simple fractional relations of the bar. And besides bulk of material, in pitch-outline there is great complication of rhythmic motion. As already stated, circling rhythm is the one peculiar to pitch, but since it contains also both idiomatic outline and undulating rhythm, it partakes thus in almost every kind of rhythmic movement that exists in music. All these various rhythms of pitch, when united, form the sum of the effect of pitch-outline in rhythmitonal art; it is seldom that that effect is due to less than all these in combination, and when it is further considered that each rhythm contains within itself varying units of motion, and that all these varying units, with all their interrelations and varying recurrence, are harmonised into one outline, it becomes evident that we have here a system even more highly organised than that of time-outline. In view of this complication it is not surprising that undue importance has been attached to pitch. But complication in itself is a thing that makes for weakness rather than strength; it is apt to tie the hands of the artist till he become the

slave of his own art, and therefore, as a general rule, the stronger the music, the more certainly will pitch fall into the background.

History shows clearly that tonality is an accessary rhythm. It is impossible for the weaker tonalitive standards to develop without the assistance of the time-standards. A definite time-outline must first exist, and no tonalitive development has ever taken place that was not founded upon the time-beat. The only attempt at basing music upon synchronous pitch-outline was that made by the monks of the Middle Ages. But even the monks, with their false notions of consonance, were unable to proceed at all without a time-standard, and once the elementary beat of pulsative rhythm had entered in, it began to leaven the whole, and finally after some centuries true consonance appeared. These musicians held to their original idea, in that they regarded consonant and dissonant relations as the main thing, and admitted pulsative rhythm no more than they were obliged. During the fifteenth and sixteenth centuries we have in church-music and certain secular types founded upon it, the nearest approach to a music based upon circling rhythm that has ever existed.

It may be urged, however, that this development can hardly be described as one of circling rhythm, seeing that tonalitive relations in the modern sense do not exist in it. It is true that the tonalitive definiteness to which we are accustomed is not here, because this music lacks the standard of the key, the absence of which produces the uncertain rambling movement which distinguishes it from the normal tonalitive usage. But

on comparing it with microtonal music the difference is at once apparent, and the type appears by contrast to approximate more closely to European tonality.

It is precisely this lack of the key-standard that points to the limitations of pitch considered as a factor of evolution. It is due to the absence of the bar-standard of time from this music. Such indications of time as then existed were merely a means of counting correctly the time-beats of the single part, and implied no collective grouping into a larger unit. Thus the attempt to develop music on pitch lines only, defeated its own end, and was doomed to early destruction, affording historical proof of the true relations of time and pitch.

The aimless rambling amongst chords which formerly characterised music has given place to a movement of the opposite extreme, the over-emphasis of tonality by means of which the key is exalted into an end in itself. "In order to establish the key" is a phrase constantly to be met with in musical instruction books, whereas it is quite certain that no composer with ideas in his head has had any object in writing except that of giving the fullest utterance possible to these ideas. If the idea required a well-established key, established the key was; but this is quite another thing from introducing an idea *in order to establish the key*, or to bring about a modulation. The notion is ludicrous in the extreme, because it reverses the normal condition of end and means. Any tyro in composition can establish a key or an orthodox succession of keys, but who can give us the ideas of Beethoven?

The whole conception of tonality requires to be recast in relation to idiomatic outline. The key is of value only for its emotional effect. The gravitation of tones and chords to a centre produces in itself a feeling of repose when contrasted with movement towards other points, which appear as temporary centres, and excite feelings of unrest. The more rapid the transit from point to point the greater the restlessness. This is the rhythmic significance of our key-system. The outline of pitch is the only one that can suggest repose in music, the absence of movement, and, therefore, of rhythm also in the tonalitive sense. This, it will be perceived, is a certain, and to some extent, a mechanical method of obtaining an emotional effect. But when it is made the accessary to the idiom, the mechanical character vanishes, and it becomes a factor of enormous value. The single idea requires the repose of the key in which to develop itself; a kindred idea will require a kindred key to the first; a strongly contrasted idea will require an equally strong contrast of key. An examination of Beethoven's work shows that this was his method of key-distribution, however little he may himself have been aware of the reasons for his choice.

Undulating or free rhythm being a condition of rise and fall stands apart from idiomatic and tonalitive outlines. It is concerned not with the single notes of music themselves, for they belong to strict form, but with the speed at which they are taken, with their direction and position in pitch, with their varying intensity, and with their colour. Its material is thus the general tone-material of music, irrespective of the

standard units of time and pitch. The complete wave-rhythm consists of hastening and slackening of speed (accelerando-ritardando) of a rise and fall of pitch, and of an increase and decrease in intensity (crescendo-diminuendo). Colour has no wave-rhythm of its own, but by adding instrument to instrument assists to form the climax.

While it is evident that undulating rhythm constitutes a most important part of musical effect, its nature is one of the greatest simplicity, and its use is largely dependent upon the union of strict and free form. As both standard and idiomatic outlines grow out of this union, it is rightly regarded as the essential form of the art. It would be quite impossible for a concerted art of music to exist founded solely upon the vague emotional impressions of wave-rhythm. The sharp, clear outlines of strict and free form are needed to give intelligible order and, therefore, coherence, and any attempt to understand musical form is mainly concerned with analysis of the principles upon which that union rests, and the tracing out of these principles in the technical evolution of the art. Modern tendencies in favour of a preponderance of force and colour over the other factors of music may produce compositions sensuously charming and with an air of novelty, but they cannot have the grit, vigour, and spontaneity that arise out of the union of strict and free form, and especially from the development of pulsative rhythm.

The loftiest emotional music is invariably found to be of a rhythmic nature throughout its whole range. Time-outline is naturally rhythmic, since it makes no

sensuous appeal, but into the other outlines a very large sensuous element necessarily enters. The lowest order of emotions are the ones most closely connected with sensation. Therefore, *unless these sensuous outlines are dominated by rhythmic principle*, their tendency will be to give utterance to the lower sensuous emotions. Where we find a lack of idiomatic development, a pitch-outline freeing itself from the rhythmic cadences of tonality and revelling in the purely dissonant and chromatic in combination with colour and force of overwhelming proportions, *this is the music of the lower nature*. In order to combat the effect of this demoralising emotional force, it is necessary to assert and to reassert the supremacy of rhythm.

The most important truth of musical evolution is that the highest in music is only to be attained by a harmonious working together of all the factors under one controlling principle. Of its three main rhythms every one is essential to the full development of the others. Pulsative rhythm lacks repose without a pitch-standard, tonality is virtually dependent upon a developed time-outline, both are apt to become monotonous if long continued without undulating rhythm, while wave-movement itself, without idiomatic outline, loses all sense of climax, and wearies the mind by a ceaseless rise and fall. None of these rhythms when isolated, that is, when the mind is entirely absorbed in it, has anything approaching to the emotional power possessed by the combination. And so rare is it to find a mind that is capable of appreciating and balancing all three, that the greatest in music is necessarily of equally rare occurrence. In

Beethoven we have perhaps the solitary instance of an absolutely perfect balance.

It is evident, however, that any mind can in its early training be taught to look for and appreciate all three kinds of rhythm, and that this mind will have an untold advantage over the one that has concentrated its attention upon one only, or has never been taught to look for rhythm at all. There is no fear but that the mind which knows the whole will soon discover its own natural bent, but the student who is trained upon tonality only, looks upon it as the whole instead of as a part, has no knowledge of anything else, and is narrowed and perhaps thwarted for life. The evil is made worse by the fact that to the weaker accessary rhythm is given preference. Pulsative rhythm will, in the Western mind, lead to tonality, but the reverse is not the case. The narrow use of tonality that at present holds the field in education leads nowhere, but to a repetition of exactly what exists already, and for which there is no future.

# CHAPTER II

## TIME-IDIOM

Analysis of time-outline—The time-figure—List of time-figures—Relation of the figure to the accent and the beat—Phrased, slurred, and tied figures—Syncopation—Relation of the figure to orchestral instruments—The function of equal time-outline—The idiom in melody and polyphony—Relation of the idiom to the accent—Free time-idiom.

THE analysis of time-outline in melody, it is hard to see why, has hitherto been held to lie outside the domain of the musician. A more mistaken view could hardly exist. For the critical understanding of melody, the intellectual appreciation of its beauties, analysis of time-outline is as essential as analysis of chord-movement is to harmony. Melody, moreover, is a far more finely organised outline than is harmony, and its analysis is a more essential matter. Time-figures form, as it were, the skeleton of the art, and lacking these, music tends to become invertebrate or wooden, like human figures drawn without sense of anatomy.

Since the strict precedes the free, we shall find this gradual evolution taking place in time-outline. The primitive savage at first repeated his time-figure with one unaltered clothing of pitch, force, and colour, and thus produced a monotonous sing-song, an absolutely strict form of development depending solely upon exact repetition. In course of time this has given way to incessant variations in pitch, force, and colour, and

even the time-figure is no longer regularly or precisely repeated. It is combined with other figures, varied with passages of equal time-outline, and still fulfills the two purposes of unity and vigour of utterance. Having once grasped by ear the form of the time-figure, we shall recognise it under astonishing transformations, and in such recognition lies the main continuity of rhythmitonal music, the time-figure causing a relation to exist between what has gone before and what is to follow after. It is clear that in the understanding of music memory plays a most important part, since if we are unable to remember the form of the time-figure we shall not recognise it, especially when disguised. Memory for time-relations is even more important than for pitch-relations.

The time-figure has definite relations to the standards of time-outline, and its character of strict or free is determined by these relations.

The following list of time-figures will make this clear :—

BEAT-FIGURES

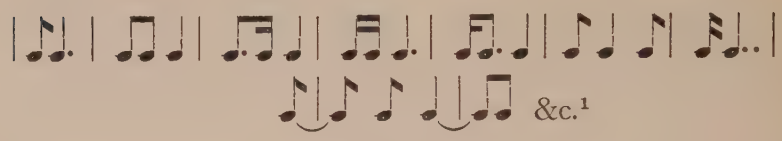
Strict—

Free—

BAR-FIGURES OF TWO BEATS

Strict—

Free—



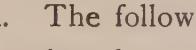
&c.[1]

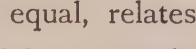
EQUAL FIGURES

&c.

It will be seen from these examples that the main effect of difference between strict and free is caused by the position in the bar of the longest note, and to a lesser degree by the manner of the division of the single time-beat. The effect of a longer note is to impress the ear with a sense of greater importance than belongs to shorter ones. When this effect is united with the strict accent, *i.e.* when the longest note occurs upon the first beat of the bar, the time-outline appears to flow with the regular accents. In the reverse case, as in all the examples marked "free," where the longest note is not on the first beat, the time-outline beats against the accent. And while the strict accent of music continues its mechanical unvarying method of pointing out the standard outline of the

[1] It is obvious that the greater the inequality of values the more difficult does it become to grasp them in relation to the standard. Extreme contrasts are generally impracticable, being inartistic through lack of balance, particularly in melodic art. With the exception of certain eccentricities in the splitting of values, this list practically exhausts the material available for time-figures. It can be translated into its equivalents of a higher or lower value, *e.g.* the relative duration remaining unaltered.

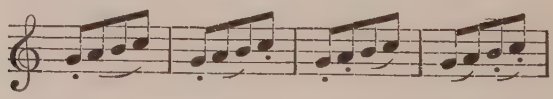
bar, within the time-measure thus rigidly punctuated runs the free time-outline of music, sometimes flowing with, sometimes ebbing against it. Occasionally the ebb becomes a counter-current of sturdy defiance, and counter-accents are called in to assist the contest. Thus the monotony of the unopposed flow of time-outline is relieved, a new balance is created, and a feeling of energy is imparted to the music. If strong counter-accents are added, a restless and agitating effect may be produced, and so powerful is the force of accent that it alone can create the sense of contradiction quite apart from the effect produced by relative duration. The following instance,  where no figure exists, but only an equal outline, has an undoubtedly free effect. As a general rule the more counter-accent is used the more striking and passionate will be the utterance, while that of duration is of a quieter nature.

The term bar-figure does not imply necessarily that the figure occupies the whole bar, but that it relates to the bar-standard, and in the analysis of time-outline it is important to consider whether the figure relates to this standard or to the beat. The strict beat-figure, if continued and varied with other beat-figures, free or equal, relates to the beat only; but if it be followed by a crotchet,  it becomes a free bar-figure, because the longest note of the bar is not found on the first beat. The strict effect of the dotted quaver is overpowered by the free effect of the following crotchet. In order to decide whether

a figure is strict or free, it is necessary by ascertaining its length to discover to which standard it refers. In the majority of cases the bar-standard prevails, and an outline based upon a beat-figure may be known by the fact that the figure or some variation of it must recur on each beat.[1]

The equal beat-figure is in itself neither strict nor free, but becomes so according to its position in the bar: Strict, Free, It thus relates to the bar-standard and not to the standard of the beat. Its equal character can be altered by phrasing, which concerns the connection (legato) or disconnection (staccato) of its notes. If the whole figure is legato, or again all staccato, its equal character is maintained, but if the two effects are mixed an inequality appears contradicting the equal notation. The mixture of legato and staccato effect forms figures out of a notation of continuous equal time-outline, a change of pitch being needed to give effect to the legato.

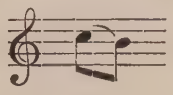
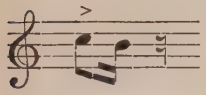
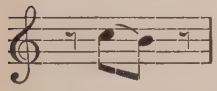
Example :—



The various degrees of staccato shorten duration as if rests were written :—

The staccato markings thus form a kind of shorthand,

[1] Tunes based on the ternal beat-figure are common in English folk-song, and an example of the dual beat-figure is to be found in the Morris Dance, "Rigs o' Marlow."—Appendix, Sections S and R.

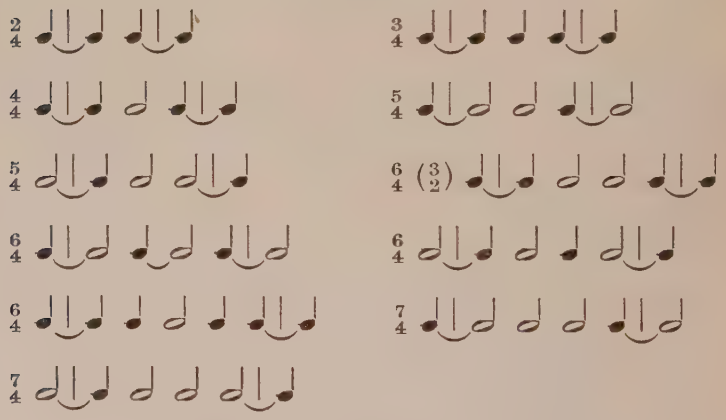
which is much more easily read and written than the complete notation. All phrased figures are strict or free as are the figures of notation. As, however, the importance of a note in time-outline lies more in its attack (or starting) than in continuance, the employment of rests (or of the staccato marks) to *shorten* duration does not affect its character of strict or free. The legato line placed over two notes or chords of moderately fast tempo and of varying pitch is called the "slur," and has the effect of giving a feeling of accent to the first and slightly reducing the duration of the second. Thus  sounds as if written  If the first note of a slurred figure fall between beats, it forms a free beat-figure— 

The tied figure annuls the strict accent, and is therefore free. The first note of this figure is a minim, being written as two crotchets for convenience of notation; and what should be the accented beat is joined on to the last beat of the former bar. Here the strict accent is made to disappear entirely, but so strong is the conception and consequent expectation of this accent that its effect will continue mentally perhaps for many bars without intermission when no accent is actually heard, and when the time-outline itself appears to suggest another accent altogether.

This is an effect known as syncopation. What renders it possible is the regularity of the strict accent. Hence this can be easily retained by the mind (any exact time division being remembered far more easily than successive varying ones), and even held against an opposing force.

The following table shows the types of syncopation with differing time-signatures. Some of these, especially in $\frac{5}{4}$ and $\frac{7}{4}$, are very difficult, owing to the irregular nature of the bar, and are consequently but little used.

### Syncopation on Beats



### Syncopation between Beats

This does not vary with change of bar, but only with the beat-division, dual (1) or ternal (2):—

An effect of the nature of syncopation can be pro-

duced by the alternation of strict and free in consecutive bars as follows:—

or with the addition of a time-figure:—

The essential feature of this effect, as in syncopation, lies in the mental carrying on of the strict accent, and the consequent realising of the $\frac{3}{4}$ time against the irregularity of the outline, which is written as in $\frac{2}{4}$ time, an effect overlooked by writers on music, who refer to it as giving the impression of a change of time to $\frac{2}{4}$. If that were intended the composer would so have written it.

Time-idiom identifies itself with instrumental art, and it is natural that an important part should be played by orchestral colour in the determination of the time-figure. Time-outline forms no inconsiderable part of the technique of an instrument, and effective orchestral writing is as much dependent upon congenial time-outline as on congenial pitch-outline. The exact figure treatment which is best suited to any instrument can only be grasped by practical acquaintance with its character; it must be either played or frequently listened to alone and in combination with other instruments. As a general rule, the broader and heavier the quality of tone, the less suited is it to staccato effect and rapid rhythmic movement. The brass instruments of the orchestra and the louder stops of the organ come under this heading. Broad and

equal masses are the natural treatment for heavy quality, and any other treatment tends towards vulgarity. The strings and wood-wind instruments, being mostly of a lighter quality, lend themselves easily to rapid staccato or legato effect. The staccato of the strings, however, has quite a different effect from that of the wood-wind, and is capable of finer degrees of variation. In all wind instruments both the attack and the stoppage of the tone are less sharp and sudden than those made upon any bowed stringed instrument. Where the attack is made by the bow a detached effect can be produced without appreciable change in the value of the tone. This is impossible with wind instruments, where any deviation from legato must consist in a shortening of duration. It is also evident that the sharp accents characteristic of the strings and percussion instruments are not to be obtained from the wind or from voices. The time-outline suitable for wind instruments, and especially for voices, is necessarily weaker and stricter than the normal instrumental usage.

The percussive effects of time-outline are used in the East as a substitute for the harmonic accompaniment of the West. Asiatic drummers are said to possess considerable skill in adding such extempore accompaniments to a song. There are various different ways of striking the drum to produce an acute or a graver sound, and lesser incidental beats are interpolated between the more essential ones, so that the art of effective time-accompaniment is by no means to be despised. It is unfortunate that Europeans who

have made studies of the music of any Asiatic country usually forget to mention that such a thing exists.[1]

A continuance of notes of equal length is in equal time-outline. This forms a most important effect in modern music, but its use here appears to be a late development. The origin of equal outline was the time-beat, and in primitive music it exists principally in this one form. Thus if the crotchet be taken as the beat notation, it may be said that equal outline was confined to the crotchet. Practically in all vocal parts and in non-percussive instruments the outline consists of some simple idiom, the drum or gong being reserved to indicate the accent and the beat. But in course of development, as monotony gives way to variety, every new possibility of contrast is seized upon, and thus equal time-outline becomes of use, not merely simultaneously with an idiom, where it forms a natural background, but also to cover large tracts of music-space on its own account. Here its function is still that of an accessary, for as the form of music is not only synchronous but

[1] A notable and apparently almost the only exception was the Frenchman Villoteau, who, when sent out a hundred years ago on the Napoleonic scientific expedition to Egypt, made an invaluable collection of music in Cairo, including many examples of time-accompaniment, which he had minutely studied. These are composed of strict figures, one of which, after continuing for some time, will change to a more rapid one, the beat growing louder, and at each change there is increase of intensity in pace, force, and figure till the highest point is reached and a fall commences. Thus a distinct wave-rhythm is produced quite apart from any pitch-outline. This is a dance-type, of which time-outline is the only musical accompaniment, and many of these were noted by Villoteau in Cairo, played upon castanettes, tambourins, and drums. Percussive time-outline appears in Europe as the accompaniment of the march or the dance. In Spain it is familiar on the castanets, and as hand-clapping or stick-rapping occasionally assists the English Morris Dance.

successive, time-idiom is made of greater prominence by spaces of equal time-outline in the course of development, and such spaces are absolutely essential to the balance of a long work. This effect throws a veil over the memory of the sharp unequal outlines of figures, which would otherwise weary us by their perpetual inequality. The larger the scale on which equal time-outline is required the more rapid must be the pace of it. Therefore a considerable amount of technique is required for its performance, and it is an effect impossible to primitive art. It will be found that the closer this equal outline approaches to the actual pace of the beat the less effective does it become. It requires either to be the beat, or else to be considerably slower or considerably faster. The former may be an effect of solemn grandeur and dignity, but it cannot long continue without monotony, whereas the more rapid the outline the longer it can be maintained. In this way not only does it obliterate a previous idiom, but unless strongly accented its tendency is to lessen the effect of the bar-standard. Thus is produced a general and broad effect of contrast between strikingly free form, which, while contradicting the strict accent, also emphasises its existence, and strict form which pursues the even tenor of its way, neither contradicting nor emphasising. The same alternation may occasionally be observed in miniature in a folk-song.

All variations of time-outline in melody can be classified broadly under three heads, according to the predominance of equal outline, of the strict figure, or of the free figure: (1) The basis of equal outline varied

by figures; (2) the basis of the strict figure varied by other time-figures, strict, equal, or free; (3) the basis of the free figure also varied in the same manner.[1] It will be found that in a small melodic vocal type, where but little pitch variety can be obtained, the time-outline will consist of one principal figure announced at the opening, varied by other figures. Upon the balance and order of these figures the main effect of the melody will depend, the pitch-outline (generally a diatonic mode) being of a limited character. In a large polyphonic instrumental movement, on the contrary, the pitch-features represent endless variety, while time-outline has to preserve unity. Consequently one time-figure will sometimes prevail throughout an entire movement with variations of pitch or of equal outline only.[2] This is, indeed, the more usual condition of advanced idiomatic development.

It is remarkable that the essential effect of an idiom as well as of the single figure is due to the standards of time-outline. It is a fact of lesser consequence that the figure itself sets a temporary standard, forming a model upon which all successive variations proceed. Such variations, from the point of view of pitch, force, and colour, are often considerable, the time-figure itself may undergo slight changes and still be recognised, but so strong is the

[1] See Appendix, Sections R–W.

[2] An example of this will be found in the Scherzo of Schubert's Sonata in A Minor, Op. 42. Exclusive of the trio, this movement consists of 134 bars, in which one figure is repeated no fewer than 72 times. In the first 28 bars it occurs 10 times, in the next 8 bars 6 times, in the next 56 bars 35 times, in the last 42 bars 21 times.

effect of the time-standards that it is less the nature of the repetition than the position of its recurrence in the outline that causes the main effect of the idiom, and therefore of the whole time-outline. Time-idiom as well as the single figure is strict or free, but the idiom relates not to the standard of the single bar but to bars in succession. The strict reiteration which causes the beat and bar succession can either be enforced or contradicted by the idiom. When a figure is repeated in the same position in each bar, *i.e.* at exactly regular intervals, the idiom is strict; if repeated in another part of the bar, or not regularly in each bar, the idiom is free. The strict figure can be irregularly reiterated in a free idiom; the free figure can be repeated exactly in a strict idiom. If differing figures are successively combined so that no coherent repetition occurs, the idiom is lost. But even where some contrast of time-figures is desirable, as in melody, it will be found that any good tune not based on equal outline has one prevailing figure throughout the whole of it, sufficient to give the impression of an idiom; it is freely varied, but the variations are recognisable as such, and do not appear as new and unrelated matter. The tendency to add figure to figure without reference to what has gone before indicates a lack of rhythmic grip. An apparently opposite tendency is that of contrapuntal art—the drowning of all figure effect by the preponderance of equal outline in the sum of the parts. Whether, however, we have too many figures, or none at all, the practical result is the same—the

absence of idiom and hence of clear reiteration. The reverse failing is found in too obvious a repetition. A strict or partially strict idiom carried on throughout a work indicates a weak and undeveloped condition of rhythmic initiative, a mind that cannot break away from the tyranny of the strict accent. Most of the modern church music and the popular music to be heard on barrel organs is of this description.

On the other hand, the charm of a free time-idiom lies in the ease and unexpectedness of its appearance or disappearance. Perhaps other figures are woven in, or the background of equal time-outline is used to carry on the movement. There is here no law, but a vista of endless possibilities, an immense store-house over which the composer's imagination hovers, selecting intuitively that which answers the image forming in his brain. If the figure depend on the individual mind, so much the more does the idiom, and it is precisely the track of this development that testifies to the genius of a composer or exposes his deficiencies. A perfect development implies a balance between strict and free form which answers exactly to the underlying emotional condition of which it is the utterance. There will be just so much strict and so much free as is needed to awake the right feeling, and this not by any process of calculation, but, as it were, by the grace of God. This marvellous balancing of manifold opposing factors into a consecutive organic whole is a thing that actually transcends intellectual comprehension in detail. Every moment the conditions change, the mind is baffled by the rapidity

of the motion; the factors may be grasped for one bar, but what of the thousand bars to follow, all relating backward or forward to one another? There is no parallel to it in any other art, and in complexity of actual form and simplicity of appeal, music, of all human utterances, approaches nearest to the immensity and the infinite variety of Nature. Only the intuitive mind that called such art into existence can grasp it, and it is then grasped not by means of its factors, but suddenly and without effort as a whole. The intellectual attempt to realise the factors is necessarily limited, and can never take the place of the intuitive grasp, but it can at least go far enough to realise somewhat of the conditions that make for the highest art, and thus to distinguish critically between the true art-work and the spurious mechanical imitation.

# CHAPTER III

## PITCH-IDIOM

Rhythm in pitch—Dependence of pitch-outline on the standards of time—Hence importance of free time-idiom—The pitch-figure—Relations of time- and pitch-figures—Pitch-idiom a secondary form—Figures of accompaniment — Sequences — Changes of values in pitch-figures—Metamorphosis compared with idiomatic development.

It is proved by ethnological research that there was a stage before definite pitch appeared when music consisted of noise or howls reduced to time. When aided by early flutes and the stretched string of the hunter's bow men began to sing sounds of definite and sustained pitch instead of confusedly rambling about, the principle of the rhythmic order appeared in pitch-outline. Reiteration, already well developed in time-outline, was naturally applied to pitch. The tendency of this was to establish an elementary circling rhythm. Reiteration of any single note will produce a sense of a melodic centre, and when notes in chord or scale form are intermingled, reiteration of one of these upon an accented beat will produce a like effect. To elementary tonality frequent reiteration is essential.

Since pitch-outline implies movement in time as well as pitch, and cannot exist without a time-outline, it follows that it is governed in the first place by the

reiterative standards of time and only in the second place by the standards of pitch. We have already considered the relations of time-outline to its own standards, and it is now all-important to make clear the effect of the beat and the bar upon pitch-outline. Musicians are well aware that any striking effect, such as a cadence, a suspension, or any pronounced change of chord or key, if placed between the accents (and more especially if between time-beats), will either lose all its force and become mere passing detail, or else sound like a mistake. An apparent exception may occasionally occur where a sudden leap to a high note takes place on a weak beat, but it will be found that, unless accompanied by free accent, the even flow of the strict accent will remain undisturbed, and in any case the effect is one for exceptional and not normal use.

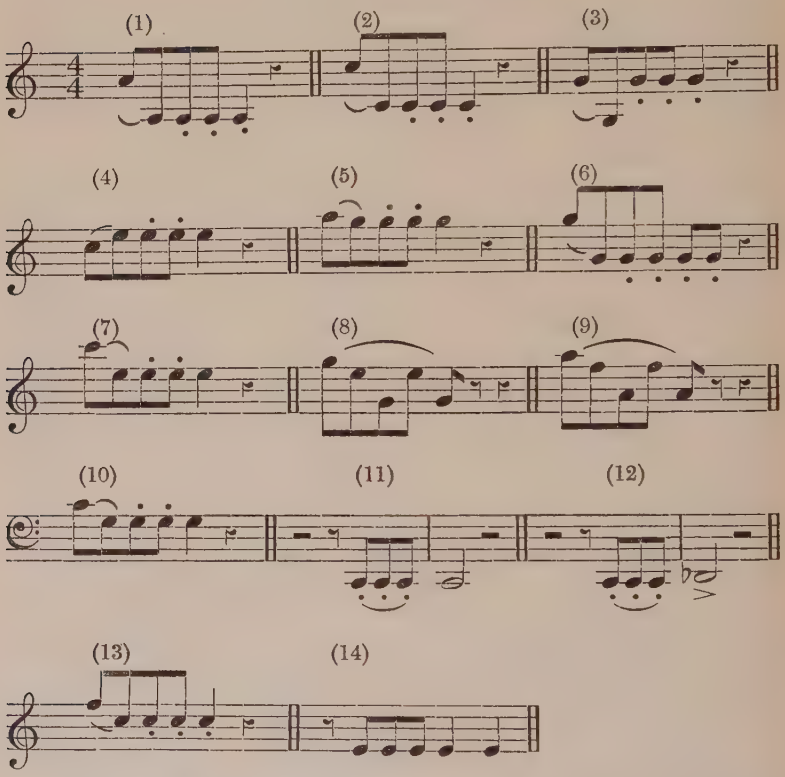
We are thus brought face to face with the following facts: firstly, that it is less the relative pitch of a note, consonant or dissonant, that determines its importance than its position in the bar; secondly, that the only thing in music that is strong enough to overpower the strict accent is free time-idiom involving free accent. From this it appears that pitch-outline is completely at the mercy of time-outline and accent, and that all its own effects which are in origin and character due to pitch have to be adjusted in accordance with the strict accent, in order that they may be rightly heard. And it further follows, if the right balance of strict and free form is to be preserved, that time-outline must generally predominate

over pitch-outline, because only a free time-idiom can preserve this balance, the effect of pitch being inevitably that of strengthening the standard outline in order to get a hearing for itself. It will be found that wherever music has developed freely on natural lines, that this balance has asserted itself. Melody is essential to it, while a purely polyphonic music will always lack the balance because the mind is absorbed in pitch to the neglect of time. Hence comes a strict time-outline. In order to obviate the monotony of this in performance the bar-standard is allowed to drop out by omission of its accent, and there is only a subordinate time-beat left to keep the parts together. Strict accent comes to be considered a somewhat vulgar superfluity, its true function having completely disappeared.

But where pitch-outline has developed on natural lines it assumes an idiomatic character derived, in the first instance, from time-outline. The time-figure naturally gives birth to a pitch-figure, a few notes or chords of varying pitch modelled on the lines of the time-figure. In a strict development the pitch-figure is usually incessantly and exactly repeated. But in course of time, as strict form gives way to free, variety is required. As the following example will show, this variety mostly comes in, not as a modification of the original time-figure, but of the derived pitch-figure. The principal variations of one of the leading ideas of this sonata are here presented, and the movement is one that will repay exhaustive analysis.

SONATA IN A MINOR (Schubert, Op. 42).

*Time and Pitch Idiom.*




Frequently pitch-idiom will tend more and more to variation until it may lose its identity and become merged in a continually varying pitch-outline. When this stage is reached repetition in pitch-outline is at a minimum, the ear being satisfied by the relations of time-idiom and the larger outlines of circling rhythm. But the pitch-figure does not, therefore, disappear from music altogether. On the contrary it reappears under new conditions. It is in combination with equal time-

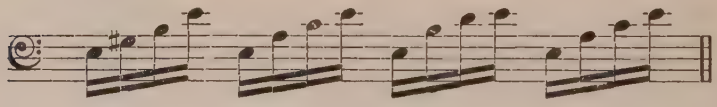
outline that the pitch-figure finds its normal function. Here it is indispensable. Owing to the absence of unequal values, and, therefore, of the time-figure, the pitch-figure and its idiom actually replace time-idiom. Time-relations fall into the background, and pitch-relations take their place as the exponent of the idiomatic idea. That these are the weaker kind is evident from the fact that its possibilities of variation are much smaller. Time-idiom will naturally develop a free pitch-outline without loss of recognition of its figure, but pitch-idiom requires an equal time-outline, else it will remain unnoticed, or merely reinforce the time-idiom. So long as daylight lasts, moonlight is ineffectual, and the absence of sunlight is required that moonlight may appear. These relations suggest their counterpart in music in the relative positions of the time-figure and pitch-figure. Wherever the two idioms are found to coincide exactly, there is a temporary reversal to primitive conditions for the sake of extreme clearness. The advanced stage is the independent evolution of both, each producing its own effect, which is essential to a fully developed musical work.

In considering pitch-idiom we are thus dealing with the secondary and derived use of the idiom, which, though it may appear simultaneously with the primary use, becomes essential to music only in the absence of the latter.[1]

[1] The development of idiom that first asserted itself in the music of culture was not the primary one of time, but this secondary one of pitch. When we consider that pitch-outline was then uppermost in the minds of all musicians, this inversion of the normal order appears very natural. The preludes to the "Forty-eight" are to a great extent founded upon melodic pitch-idiom.

Pitch-idiom is especially noticeable in what are generally known as "figures of accompaniment," for the most part consisting of melodic outline. These figures are seldom absent from the great rhythmitonal works, where they appear constantly in accompanying parts, and also occupy long spaces of equal time-outline on their own account. If the figure be an important melodic one, only slight changes can take place in its intervals, for if these be too much varied its form will not be recognised in the repetitions, and the idiom will vanish. If, however, it be founded upon harmony, as are most accompanying figures, the intervals will vary with the chord-change, and direction of pitch becomes the binding force.

Example :—

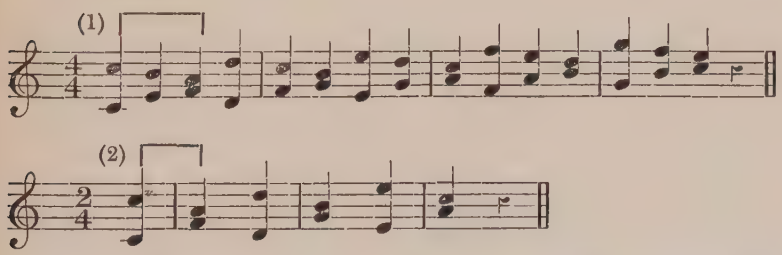


The student of music will recognise as an idiom of pitch the usage that is known as sequence, the repetition of the pitch-figure upon a higher or lower plane of absolute pitch. This is an outline generally harmonic, involving undulating rhythm. The sequence must rise or fall ; and though the wave-motion is as it were by step and not by gradient, the ear is familiar with this necessity of pitch and accepts it in place of the gradual movement. Where a long pitch-figure forms the step of the sequence (extending over two or more bars) the wave-rhythm will be perhaps more apparent than the idiomatic outline. The tone-movement will appear to be gradually rising, suggesting a coming climax, or falling down into the depths, and

the fact of repetition by step will be but slightly noticeable. Under these conditions a time-idiom is frequently found also, in order to strengthen the pulsative rhythm, its small figure undergoing several repetitions on one step of the sequence. This complex movement is necessarily a polyphonic development.

A sequence does not admit of breaks in the repetition, and therefore the pitch-figure cannot appear and disappear with the freedom of the time-figure, but will be practically lost unless continuously repeated on successive steps. There is only one case where the sequence can be taken as opposing the bar-standard. This occurs (1) where the number of beats in the pitch-figure and in the bar do not coincide, or (2) where each step of the sequence begins on a weak beat in each bar.

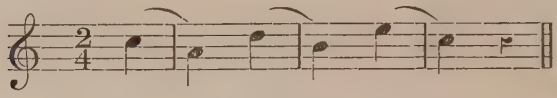
Example :—




The ear holds the rhythm of the pitch-idiom and recognises the beginning of each step, while it also hears mentally the strict accent, a complex effect due to the union of strict and free form between time and pitch, instead of, as is more usual, between varying time-outlines only. This effect, however, must be considered of a doubtful nature, since it is possible to hear both these sequences strictly,

and in order to ensure a free effect the slur must be added, thus forming a phrased sequence.

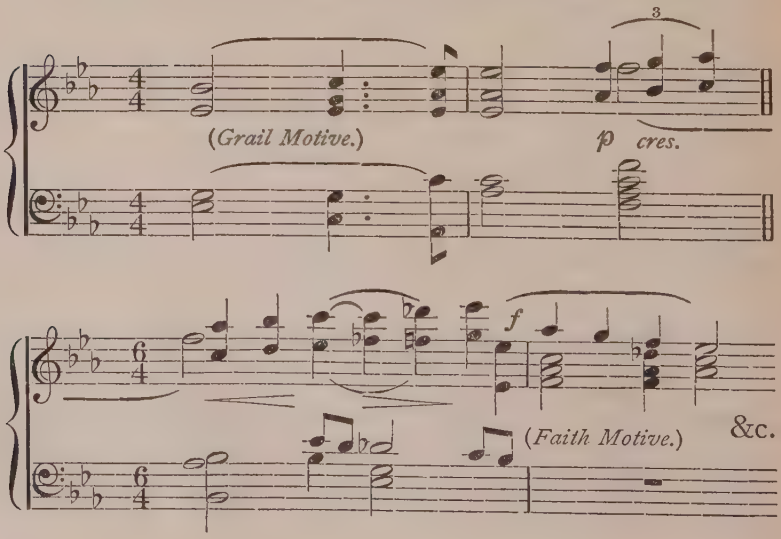
Example :—



Attention has already been drawn to the important part played by equal time-outline as an accessary in the later evolution of music. It has been much used to link together time-idioms of an opposing character, which would not follow one another immediately without a disagreeable abruptness in the transition. But this can also be done by means of the pitch-figure only, in a more concise manner. Varying time-figures can be *shaded* into one another by an anticipation of the new one combined with the previous pitch-figure.

Example :—

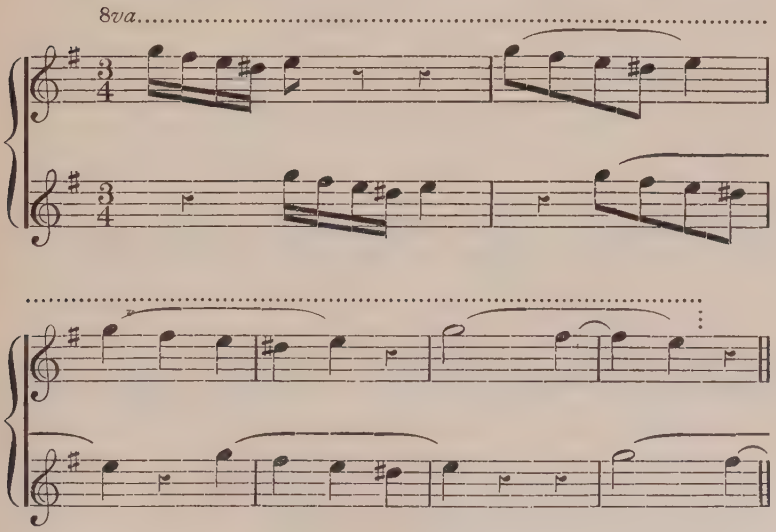
"Parsifal" (Wagner), Vocal Score, p. 74.



It is possible to have a variation in the time-outline between a pitch-figure and its repetition. Since there are varying values of equal time-outline, it is a simple matter suddenly to halve or double that value by turning crotchets into quavers or minims, each figure still existing in equal time-outline, and being recognised by its pitch-outline. If the figure involve the whole outline, this effect will be a hurrying up or slowing down of the tone-movement by jerks. In this way it is used by Beethoven, but is an effect obviously for occasional use only.

Example :—

Sonata in E Minor (Beethoven, Op. 90).

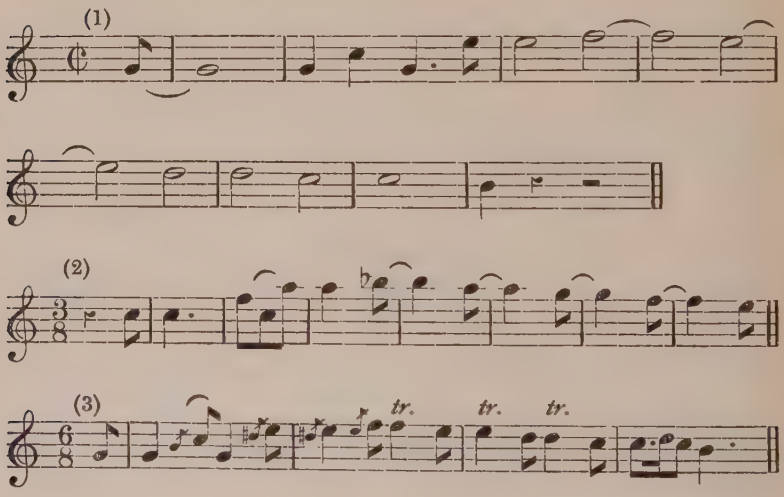



In counterpoint it is familiar as diminution and augmentation, these relating to a single part.

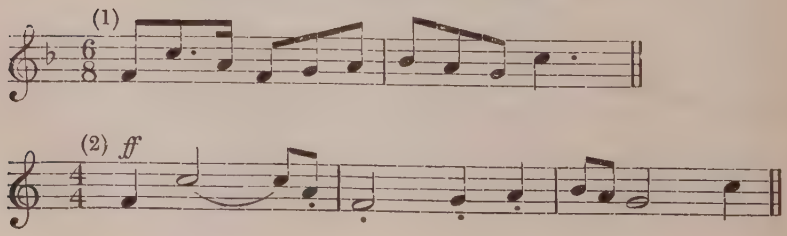
Sometimes there occur time and pitch figures in combination, where not time but pitch becomes the

factor of reiteration. The intervals of pitch are preserved intact, but the values of time are changed. The beat may be altered from dual to ternal, or the reverse, certain tones may be lengthened, others shortened, accompanied by changes in absolute time. It is, however, to be noted that the general time-features of the original figure are preserved. A long note will be more prolonged, a short one hastened, but their relative values will not be reversed. Instances of such changes are given as follows :—

"Episode de la Vie d'un Artiste" (Berlioz).




Siegfried Motive (Wagner).



Not any one of these examples can be said to constitute an idiom. This involves unity of emotional import with variety of external aspect, whereas the instances above quoted show exactly opposite conditions. They combine similarity of appearance with distinct emotional change, which is not a working out of the original idea, but a new conception that will require to make its own impression. The pitch resemblance is no more than a link with what has gone before; it does not in any sense constitute a development. Nor have either of these composers attempted to use it as such. The value that the method has for the composer is the means it affords him of introducing a new emotional effect without abrupt dislocation of the tone-movement. The feeling is new, but the form is familiar; this is the direct opposite of the idiom which sustains one emotional mood with an ever-varying form. The latter is development of an idea; the former is its metamorphosis. The extraordinary psychic difference thus produced by simply exchanging the functions of time and pitch is a further proof of the essential differences in their constitutions. Time-outline is the fundamental emotional force, and changes in time-outline perforce bring about changes in feeling; pitch-outline is the secondary and lesser force, and unless this is carefully isolated in equal values, its emotional effect disappears, and there remains only the external recognition by the ear. It is easy to see that the effect we have just considered may be of occasional use to the purely musical composer, but will prove of greater value in the combination

of music with drama and poetry. Here we meet with a number of differing themes, which appear, vanish, and reappear under new emotional conditions. These require change, while the art technique demands unity. Metamorphosis satisfies both these requirements. At the same time, even in this music, a certain amount of idiomatic outline must also be present for the sake of coherence, and for the composer of absolute music it is certain that the idea can only be fully realised by idiomatic treatment. A striking theme will impress on a first hearing, but development is needed to drive home its possibilities.[1]

[1] For an example of metamorphosis in a folk-song, see Morris Dance, "Laudnum Bunches," bars 18–21, in Appendix, Section Y.

# CHAPTER IV

## PHRASE AND STANZA

Definition of the phrase and its origin—Relation of phrase to bar-standard —Articulations of phrase-form—Connection with circling rhythm—The cadence of the leading-note—Function of the harmonic cadence —The stanza—The free phrase—Phrase-form of melody—Relation of phrase-form to modulation.

THE tendency to extend the standard of the bar into a larger unit has already been observed. This unit is generally called phrase, section, period, or sometimes vaguely "rhythm." Out of this collection, phrase is the word best suited for the purpose, because it suggests what is a true analogy with language. The word-phrase and tone-phrase are identical in origin, and may be defined as a grouping of accents. The only difference between them is that the word-phrase consists of irregular accents (accents at not precisely regular intervals), and the tone-phrase of regular ones. When the word-phrase is sung, it becomes regularly accented, and this difference practically disappears. Both kinds of phrase originate in the physical necessity of taking breath, for the primitive tone-phrase, if it depart from vocal usage, occurs upon wind instruments only. This necessity has created a normal length of phrase, which can be observed in music and equally in conversation.

From these facts it may be gathered that the

phrase is not of purely musical origin, as are the bar and the time-figure, but that it is a general vocal usage common to language and music both. It follows therefore that those who would confine the normal phrase of music to equal groups of bars, thus making it into an extended bar-standard, are ignoring its origin and its constitution, and merely show that they themselves cannot escape from the tyranny of the strict accent. A strong rhythmic individuality, on the other hand, will require a certain relation between successive phrases, but not an exact relation. Exact time-relation in music is confined to the beat and bar, the two smallest equal units of recurrence, and beyond that, the larger the units, the freer their relations tend to become. The phrase being the smallest of these free units is naturally the one most influenced by the bar-standard. The functions of the phrase and bar respectively are, however, of an entirely different nature. The bar exists for the purpose of marking strict time, the phrase exists for the purpose of articulation of the free outline, and there is no need to confuse these two functions. The bar-standard is essential to concerted music, but phrase-form varies from clear to indefinite articulation, and in instrumental music may disappear altogether.

It is necessary to distinguish between the occurrence of phrases in music and a definite phrase-form. By the latter is meant a distinct articulation at the termination of each phrase, forming a break in the continuity of the outline. A slight pause effects this

in language, and this is the primitive method of music, where the silence is accounted for by rests. There are, however, several other musical methods of pointing out the phrase. It can be done by a long note (long in proportion to the values of the notes preceding), by a pause (𝄐) over a note (a vague prolongation), or by a tonalitive figure known as the cadence, which is of great importance to circling rhythm. The cadence consists of the last note (or last two notes in the case of a weak ending) which are made by reason of the articulation more prominent than the rest. From the point of view of pitch, they represent a temporary centre, a point of repose in the circling rhythm. There is degree in the importance of cadences, but each one must be to some extent a note on which the mind will desire to rest either momentarily or permanently. The relation of the cadence-note to the rest of the outline will depend entirely on the direction of the circling movement. If it is tending from the tonic the cadence is likely to occur upon an atonic tone, because after a syntonic succession this will afford relief to the ear, but syntonic cadences are naturally the more restful. The normal melodic syntonic cadence is the fall by full-tone or rise by semitone to the tonic. When the leading-note is replaced by the minor seventh there is no semitonal rising cadence. This is the case with a certain proportion (it is said one-third) of English folk-songs. It is, doubtless, mainly due to the general vocal instinct which prefers the downward-tending leading-note,

emphasised probably by the scale of the bagpipe, which has the minor seventh, and possibly by the tones of the church-modes, which (with one exception) lacked the leading-note. The combination of the minor seventh or minor second with either the major or minor thirds and sixths of the scale produces modal varieties common to all purely vocal developments. The essential feature which distinguishes such varieties from the major and minor modes is the lack of the normal rising syntonic cadence of the leading-note.[1]

When harmony is added the cadence becomes further accentuated. The harmonic figure, dominant-tonic, is the most elementary and the most typical of all chord-movement used for this purpose. It became for centuries the standard syntonic cadence, which was never allowed to rust. It received the name of a perfect cadence, or full close, from the constant habit of concluding, not merely every piece of music but every few bars with this figure, or the reverse form of it, tonic-dominant, which was called the half close, representing a slighter articulation. The only chord allowed occasionally to replace the dominant was the triad of the subdominant, and the cadence was then called plagal, after the class of church-modes which started on the fourth below the final note.

It is probably this persistent usage that has given rise to the idea that the harmonic cadence is the cause of phrase-form, which is only another instance

[1] We may observe that it appears incorrect to attach the Greek names of the church-modes to such scales, because those names indicate a form of Asiatic tonality which has no existence in music native to Europe.

of the desire of musicians to ascribe everything in music to tonalitive influence, regardless of actual cause and effect. As a matter of practical usage, when distinct articulation does take place in harmonic outline, and the harmonic cadence is used to emphasise the phrase-form, this frequently becomes over-emphasised, because too many methods are being used simultaneously to point out what is already obvious. Consequently harmony is now employed more frequently to disguise the phrase-form than to strengthen it, having plenty of means in its power that will ensure continuity and destroy the effect of articulation.

The cadence known as the full close usually indicates a larger unit of recurrence. This is sometimes called a sentence, or period, but a more suitable word is "stanza." For this unit is of the same lingual nature as the phrase, only composed of several phrases, and as it is generally poetry and not prose that is united with music, the correspondence is with the stanza and not with the sentence. The stanza represents an articulation so distinct as to divide the tone-movement into a series of blocks, each of which is more or less subdivided by the phrase. In some music the block actually constitutes the main feature. But if phrase-form is inessential to music, still less essential is the stanza. It is natural to most vocal music, and to an early stage of instrumental development, where it affords facilities for obtaining a balance, which in an immature stage the ear might otherwise be unable to grasp. But as rhythmic

feeling grows, a less obvious and more subtle method creeps in. The block of the full close irritates, and continuity is desired, the articulation of the phrase appearing sufficient to define the outline; tonality is indicated by suggestion rather than by direct statement of the tonic, and the full close is avoided; at the same time the phrase-form tends more and more to irregularity. This is a natural phase of evolution. The development of tonality leads to cadential variations, the tonic remaining no less the standard, but now requiring less obvious and more subtle suggestion, and therefore allowing for a much greater variety in atonic cadences. For the same reason the return to syntonic outline appears at less frequent intervals than it was wont to do, unless the movement is one strongly suggestive of repose. The perfect cadence is seldom heard in modern music in its complete form, except as the real close, and is not considered essential even for this, its original purpose.

It should now be evident that we are dealing with units of far less musical value than the time-figure. The phrase is not concerned with the values of time-outline, and, in short, is a mere counting of strict accents. For convenience' sake we speak of phrases of so many bars' length, but the real factor of the phrase is the accent and not the bar. In a short bar of one accent only, the two are, of course, synonymous, but in longer bars where a subsidiary strict accent occurs half-way through, the difference becomes apparent, as the phrase may end on the lesser accent. This indicates again its resemblance

to the word-phrase, which is further shown in the two forms of phrase-endings, *i.e.* or corresponding to the strong and weak terminations of poetry.

Since the phrase consists solely of strict accents, its freedom can lie only in a variation in the number of accents thus grouped together. The variation is made, not only by irregular numbers of equal bars, but by the occasional insertion of one or more bars of different length. A single bar thus inserted does not seem to upset the standard, the mind accepting it as a passing variation; but more than one bar in another time undoubtedly changes the standard, as well as giving freedom to the phrase. It is necessarily inartistic to vary the time-standard needlessly, and merely for the sake of variation, *unless the time-outline or the word-outline requires it.* Most of the time-changes in primitive music and English folk-song (where they are of frequent occurrence) are due as much to the word-outline as to the musical idiom.

The small concise type of melody, not admitting of any prolonged time-idiom, is necessarily dependent upon phrase-form. It is true that there do exist melodies in which time-idiom predominates and the phrase-form is indefinite, but these appear to be the exceptions. The bulk of melodies, whether of popular or cultured origin, are clearly, one might say, obviously phrased. The character of this phrase-form will be derived, in the case of dance-songs, from the dance, in the case of word-songs, from poetry. The fine sense that balances phrases of unequal length is natural to rhythmic feeling, and under

natural conditions both dance and poetry reveal unequal phrase-form, but in the conventional dance and poem of society this freedom disappears. Consequently in the music of culture the four-bar phrase becomes paramount, and any variation upon this monotony is regarded as a fault, or at the best as an eccentricity. The time-outline also becomes contaminated, and instead of an idiom we find the complete phrase-outline (the time-outline of a phrase) exactly repeating itself (with or without change of pitch) as well as the number of its accents; time-idiom ceases to exist unless in a very strict form, and the result may be a melody of even more sickly monotony than the equal outline of the hymn-tune.

In a small melodic type consisting of one or two stanzas only and where modulation rarely occurs, the material available for cadences is necessarily very limited, and here the desirability of unequal phrase-form is especially evident, since so little variety can be made on the pitch-side. The connection between a pitch-outline confined to one key and a phrase-form of unequal character may be studied in almost any kind of natural melody, and often it produces results of great charm, which are unknown to the cultured modulating melody with its equal phrase.[1]

[1] Where degeneration has occurred the free phrase-form is one of the first things to drop out. See the "Helston Furry Dance," in Appendix, Section V.

# CHAPTER V

## THE TALA OF THE EAST

The Eastern time-system—The Sanskrit theory of beat, values, and bar Definition of tala—Absence of accentual standard from Hindu theory and practice—Talas and time-signatures—The principle of the Western bar—The principle of the Eastern bar—The relation of the accentual-bar to Western melody—The relation of the tala-bar to Eastern melody.

We have left thus late the consideration of the Eastern time-system in order to explain satisfactorily its peculiar constitution. It is composed largely of material that in Europe belongs to free form, and that cannot be included under the head of standard tone-material from the Western point of view.

At first sight one might take for granted that the prevalence of time-emphasis upon percussion instruments throughout the East must indicate a stronger rhythmic feeling than the West can boast of, but a closer examination reveals a tendency to stereotype by this means units that in our music are naturally free. It involves, in fact, a use of time-figure and phrase that is utterly foreign to the European art. And the fact that time-outline has been with us so little analysed and is so much a matter of intuitive practice, tends to make the understanding of this foreign usage still more difficult. The day is past when an Englishman could seriously propound the theory that the raga was the major key and the ragini the minor; but we

are just as far from any rational comprehension of the Asiatic bar-system, which actually differs from our own quite as fundamentally as the raga differs from the key. It is as misleading to bar a true Eastern melody according to European time-signatures as to put it into a European key.

It is in the elementary conditions of time-outline, the values and the time-beat, that we shall find the common soil out of which these diverse systems have sprung. Fortunately, there are Sanskrit treatises in existence that deal with such points, and though of uncertain date, they contain the theory handed down from generation to generation by oral tradition, a theory which may have been in existence in the Vedic age, and which still substantially underlies the modern practice of the Hindus.

This theory, as stated by Raja Sir S. M. Tagore, is as follows: Any equal interval of time is called a *máttrá;* this is the beat; it is divisible into half-beats and quarter-beats termed broken *máttrás*, and it is also doubled, forming a compound *máttrá:* there are thus four values similar to ours of 2, 1, $\frac{1}{2}$ and $\frac{1}{4}$, which also have names, *guru*, *laghu*, *ardha*, and *anu*, corresponding with minim, crotchet, quaver, and semiquaver:[1] in addition there are larger compound *máttrás*, called *pluta*, which consist of three or more beats, corresponding with the dotted minim and semibreve: the bar is named *mancha*, is divided by perpendicular lines, and consists fundamentally of a fixed number of beats, as with us.

It is to be observed, that though the group of three

[1] Raja Tagore takes the quaver as the beat, and so brings the correspondence with crotchet, quaver, semiquaver, and demisemiquaver.

beats is a recognised unit, there is no mention made in Hindu theory of ternal beat-division; this, however, appears in practice under the occasional form of the triplet.

We find, therefore, that the standard of the beat, the values, and some kind of bar are practically common to both East and West. We come now to the point where the roads divide. This is indicated in Hindu theory by the term *tála*, of which the following definitions are given :—

"*Tála* simply means the beating of time by clapping the hands."

"*Tála* is regular metre, without which music loses all its power over the human passions."

"From simple, compound, and broken *máttrás* are formed *Tálas*, the only object of which is to calculate the measure of beating time. They are in use amongst us in both vocal and instrumental music. It is to music what metre is to poetry. *Tálas* derive different names from the variety of *máttrás* that form them." (S. M. Tagore.)

These statements sound very simple and such as might apply equally to European music. We may not beat time usually by clapping the hands, but what matters the method? It would not readily occur to the mind, that, behind this apparently obvious expression, "the beating of time," there lurks a *double entendre*. When a European beats time never would he beat otherwise than *all* the beats; but when a Hindu beats time he beats a certain selection of these chosen for him by his time-system. We are further told: "*Tála* con-

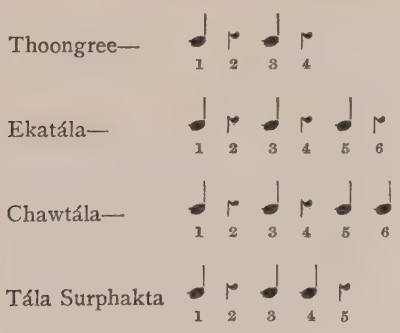
sists of two principal actions, viz. *Aghâta* and *Biráma*, *i.e.* the beating and the rest" (S. M. Tagore), and an acquaintance with the application of talas to Hindu music shows that their classification depends, firstly, upon the number of beats that compose them, *i.e.* the length of the bar; secondly, upon the beats chosen to form tala-beats, *i.e.* the particular beats upon which the hand-clapping or drum-stroke is made as opposed to the "rest" or silent beats. Did these tala-beats fall customarily upon the normally accented beats of European music, there might still be accordance between the two systems; it would be quite possible, though less easy, to beat only the accented beats of European music instead of all its beats. But since there are only a few talas that show regular alternation of beat as against a large number that are entirely irregular, it would seem that some other principle is at the root of the Hindu custom.

Even a slight acquaintance with Sanskrit theory reveals the fact that the Hindu is in his way a more thorough theorist than the European musician; he possesses a genius for classification, and if his music contained a practice of systematic accent such as exists in Europe, that practice would be elaborately defined in his theory. But no mention of any such system of accent is ever made.

When, moreover, we come to examine Hindu melody, the fact is clear that it springs out of no alternation of varying degrees of accent. The first thing noticeable is the length of the bar, which has an *average* of eight beats; the bar of sixteen beats being as frequent as that of four. A bar of less than four

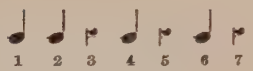
beats is not acknowledged in Hindu theory. The same average length of bar is found also in a number of Javanese melodies written down by native musicians. It is impossible to apply the European system of strict accent to such bars, because the alternation cannot be grasped, and the bar simply divides up into several smaller ones. Further, it is noteworthy, that whereas in our melodies all points of stress occur necessarily on the first beat of the bar, in these Eastern melodies all cadences and especially the final note are placed preferably anywhere but on the first beat, and more frequently upon the last beat, or even on the final beat-division, where a pause serves to enhance the emphasis of the big gong that in Java is reserved for this special position. The normal balance of the European bar is reversed, the weight being placed at the end instead of at the beginning. It is clear that if a bar is to be indicated by stress at all it must be at one end or the other, and where there is no alternation of accents to demand stress at the beginning, it seems to be a natural impulse to shift the accent to the end.

HINDU SYSTEM

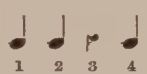


Jhanptála—

Ara-chawtála—



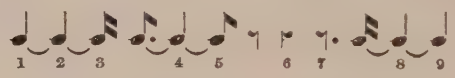

Drutatritálee—




Madhyamána—

Slathatritálee—

Tála Ara—



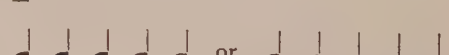

## European System

2 ($\frac{2}{4}$)—

3 ($\frac{3}{4}$)—

4 ($\frac{4}{4}$)—

5 ($\frac{5}{4}$)—




6 6 / III II ($\frac{3}{2}$ or $\frac{6}{4}$)—

7 ($\frac{7}{4}$)—

In the Eastern table the notes indicate the tala-beats; the numbers under the notes are the bar-beats. The rest is kept for the Sanskrit sign of *Biráma*, therefore tied notes are used to indicate the space between tala-beats, but these do not necessarily imply continuance of the sound. In the Western table all the beats are indicated by notes and the varying degrees of accent by lines under the notes. The subsidiary accent may vary with the sub-divisions of the beat, and the dot has to be added to obtain ternal beat-division.

From the foregoing tables the differences between the Hindu and European systems will become manifest, and it will be observed that practically the whole of the latter is here represented, while of the talas are given only a few out of many. These, however, are sufficient to show the trend of Hindu feeling. It is toward differentiation of *value* rather than of accent. If the following tala-unit be thus written, , a time-figure appears, and the union of this time-figure (considered as relative duration and not in its exact values), with varying combination of beats, constitutes the form of the last four of the talas in the preceding table. When we arrive at the combination of this tala-unit with *nine* bar-beats (the odd ninth beat being equally distributed amongst the tala-beats and rest, so that each consists of two and a quarter bar-beats), and realise further that when this four against nine has been grasped, there remains still the time-outline of the melody to be added thereto, it would seem that the last word has been said in the simultaneous differentiation of values. The ear of the Hindu in this respect might amount to the possession of a sixth sense.[1]

Such an example points, doubtless, to a long stage of evolution, an evolution which takes us back into primitive conditions, when clapping, stamping, and drumming were music, and time-outline had not yet assumed its robe of pitch. As already stated, rhythmic feeling expressing itself in the beat and the group of beats is common to all music; where the variation occurs is in the *method* of the grouping. The European

[1] See Appendix, Section X.

musician groups equal values by means of varying accent; the Asiatic groups equal values by means of unequal values. Thus the Eastern notion of a time-system is formal differentiation of duration with equal intensity; the Western idea is formal differentiation of intensity with equal duration. As usual, the methods of East and West reverse one another.

Hence we must clearly differentiate between the bar of the East and the bar of the West, if we admit the former as a bar at all. Such it is not, in the Western application, but since it has the outward appearance of the bar in notation and serves a similar purpose, it will be well to distinguish it as the "tala-bar," in opposition to the bar of our own music which can be named "accentual." It cannot be denied that this Eastern method is the subtler, and, so far as one bar only is concerned, the more interesting. But such units of strict form must be exactly reiterated; the object is to mark time, and the more unobtrusively this is done, the better is the chance given to free units and their development. The general law of rhythmic evolution, the balance of strict and free form, here enters in. Hence the desire of the Oriental partially to avoid the basis of even and strict units results in the stereotyping of free units. Thus we find in the tala-bar a stereotyped phrase, and in the tala-unit a stereotyped time-figure. The latter is the thing that appears strangest to the European mind. We do not work our time-figures into a system (Heaven be praised!), but leave it to our composers to combine and reiterate them as they will. Not so the Asiatic. His tala, having taken

time-figures under its wing, offers an immense selection of these to the musician, but upon the one condition that whichever is chosen shall be reiterated unaltered to the end of its course. The tala is, in short, a formulation of strict idiom, owing its character to its persistent recurrence. The free unit demands a strict development in order to redress the balance. The results of this upon the development of Hindu melody are very remarkable.

All natural European melody springs out of the rhythmic feeling for alternation of beats and accented beats as expressed in our bar-system. This is a conception innate in the mind of the European, so that a melody is not arbitrarily put into bars, but springs up naturally out of that rhythmic sense which determines the accents of the melody and therefore the bar-unit that belongs to it. Any one possessed of rhythmic feeling and a knowledge of notation can say whether a melody is rightly or wrongly barred; that is, whether its natural accents are enforced or nullified by the strict accent of the bar-system. We distinguish between the melody and the standard outline; still the connection of the two is felt to be a vital one and is not broken by the use of counter accents in the melody. Such an organic union of time-outline and melody can take place only upon an accentual standard basis of equal outline. For whereas the equal nature of the Western time-system forms a soil out of which free idiom naturally springs, the Eastern basis of a strict idiom, even if extended over sixteen beats, renders any development of a free idiom in melody virtually impossible. Upon such a basis what

arises is not a melody in the sense of idiomatic treatment, but a promiscuous time-outline, a sort of time-discant upon the tala, neither strongly accenting nor contradicting it, and which may exist independently of any tala at all. This is exactly the constitution of the raga, apart from its special tonalitive characteristics. It is an unbarred tone-movement of rambling time-outline, lacking a definite phrase, and wholly irregular in its stanza-form. It has been shown that all that is needed to turn a raga into a melody is to unite it with a tala and sing it to words. Language brings phrase-form, the tala enforces the needful reiteration and thus remains master of the situation, having practically the melody for its accompaniment. A very complex tala may influence the melodic outline to the complete loss of its independence. It falls in then with the tala, repeating its time-outline in each bar. Nevertheless the raga makes its influence felt in the lengthening out of the bar, whereby the phrase and the bar are brought to synchronise, a long note serving to indicate the close of both. In this way an attenuated form of tala-unit may appear, such as in *Slathatritálee*, which must give greater independence to the melody than the more concise units. And once the melodic outline begins to predominate over the tala it acquires a more rhythmic character, the raga-type vanishes, and a slow process sets in of approximation towards the European style of melody. Gradually the tala sinks to the level of a time-accompaniment, and the melody, freed from its restraint, assumes an accentual and idiomatic outline. When this process has gone far

enough, there remains nothing but Eastern tonality to distinguish it from Western melody. The tala-bar has given place to the accentual-bar required by idiomatic development, the phrase loses its connection with the bar and becomes a free unit as in European music. Most of what are called Eastern melodies when written down by Europeans are of this nature. How far they actually represent the present music of the East, how long such a process of melodic development has been in existence, and again how far it may be due to Western influence, these are questions that can be answered only by those who have lived long in the East and have deeply studied its music.

# CHAPTER VI

## IMITATION

General character of counterpoint—Origin of imitation—The round—The canon—Evolution of the rhythmic unit of imitation—An effect of time-outline—Two contrapuntal styles—Organ counterpoint conditioned by the instrument—The style of Bach—Lingual character of round and early part-songs producing phrase and stanza—The madrigal—Causes of the strictness of counterpoint.

A SINGULAR contrast to the precise reiterations of the tala is afforded by the mediæval art of the West. Though this art, as has been shown, owes its origin on the pitch-side to Asiatic tonality, no trace of the Eastern time-system is to be found in it. The fundamental character of this ecclesiastical art is its lack of reiteration in general, and of time units in particular. Of strict units of recurrence only the time-beat exists in it, there being no accentual grouping into the bar, and of the free units none whatever can be found. Time-figure, pitch-figure, phrase, stanza, all are missing. Hence the unrhythmic character of early counterpoint, the lack both of unity and of contrast.

The time-outline of this art presents irregular and continually varying conditions in the values. The object of the composer seemed to be to avoid all similarity in this respect, whether between the different voices at any given point or in the consecutive arrangement of one voice-part. The long notes that look as if they were syncopated are due

to this cause. It is evident that mere variety in itself does not provide contrast. This can only be obtained when art is built upon a basis of unity. In other words, to realise the free, we must first have the strict form, to make the initial definite impression, without which no contrast can follow. Unity in time-outline is obtained, not by a promiscuous mixing of values, but by recurrence of a selected arrangement, *i.e.* a figure.

But since the idiom is an instrumental rather than a vocal usage, in a very primitive stage of music, there appears what is generally known as the principle of imitation, by which is meant that one voice will follow another in singing the same phrase, the second beginning later and imitating the first. Several voices may be thus employed, and when these voice-parts make harmony in their imitation, a primitive musical type is produced known as the round. It is recorded of the Hottentots, by Kolbe, a German traveller of the early eighteenth century, that they sang the notes of the major triad from one octave down to the next, one voice after the other, each beginning the phrase when the former had reached the second or third tone. The voices in combination represented one chord continually sounding, while each voice imitated, that is, followed after the one before it. This is the constitution of the round, or catch. It has all the monotony of primitive song, maintaining exact repetition with only the variety of the colour-distribution of the voices. When this kind of singing had become familiar with a single chord, it must have

been easy to add another and so get the assistance of the natural alternation that exists between tonic and dominant. Then a verbal phrase became possible, which wound its way easily enough between these harmonies, the close of each phrase always coinciding with the second chord, whether it required one or more alternations. Each voice took up the reiteration of words as well as notes, and an amusing effect was often produced. Since nearly all the notes of the diatonic scale are available between these two chords, there was a fair field for melody, which formed probably the chief attraction to the singers, the harmonies involved being felt merely as a background. The round grew to the length of a stanza, and as each voice came to the close of the stanza it started again at the beginning with the same words and tune. Many old melodies show this habit of alternating between tonic and dominant or tonic and supertonic harmonies, each syntonic or atonic tone occurring on a strict accent, and frequently with passing-notes between. This is a habit undoubtedly traceable to round-singing, which was common in England, probably from the time of the Saxon invasion, if not before it.[1]

The Welsh had a kind of part-song called "nghanon," mentioned by Aneurin in his poem of the months, said to be of the sixth century:—

"In September comes the metrical nghanon."

Whether or not this song was in the style of the round does not appear, but it shows unmistakably the

[1] See Appendix, Section I.

derivation of the word "canon," which was originally similar to the round.

To the natural kind of choral singing practised in England and Wales in the twelfth century, Gerald Barry (Giraldus Cambrensis, *Descriptio Cambriæ*) bears witness as follows:—

"The Britons do not sing in unison, like the inhabitants of other countries; but in many different parts. So that when a company of singers among the common people meets to sing, as is usual in this country, as many different parts are heard as there are performers, who all at length unite in consonance, under the softness of B♭. In the northern parts of Great Britain beyond the Humber, on the borders of Yorkshire, the inhabitants use the same kind of symphonious harmony; except that they only sing in two parts, the one murmuring in the bass, and the other warbling in the acute or treble. Nor do these two nations practise this kind of singing so much by art as habit, which has rendered it so natural to them, that neither in Wales, where they sing in many parts, nor in the North of England, where they sing in two parts, is a simple (*i.e.* single) melody ever well sung. And, what is still more wonderful, their children, as soon as they attempt using their voices, sing in the same manner." The words "as many different parts as there are performers" are very suggestive of round-singing.

Imitation is commonly supposed to be a special prerogative of counterpoint; that this practice, however, was not indigenous to it, but like all that went

to make of counterpoint a fine art was acquired in the first instance from rhythmitonal music, is proved by the two facts that imitation is found in primitive song, and is not found in the earliest music of the Church. It is actually recorded that the monks of Anglo-Saxon days were *censured* for "breaking up and dividing their song by a method of figurate descant, in which the various voices, *following one another*, were perpetually repeating different words at the same time."[1] This can be nothing else than round-singing, and it appears to have been a popular and unauthorised custom of vocal entertainment in which the monks, being human, had ventured to join. That they continued to indulge in it, despite the authorities, seems likely from the famous round of the Reading MS. already referred to, which is clearly a popular and not an ecclesiastical composition. But from the existence of a curious pun upon the words round and canon in this very MS., it would appear that a distinction was then recognised between them —in short, that the canon had already found shelter under the roof of the Church.

The canon in unison (when each voice repeats the notes at the same pitch) is indistinguishable from the round if a popular tune be employed, but a canon of contrapuntal voice-parts proceeding, not by harmonic instinct, but by the science of intervals, is a very different matter. All tonalitive balance and phrase-form at once vanish, and it becomes just as easy to make the parts repeat at another pitch, at

[1] See "Musical Association," vol. viii. p. 95.

a fifth higher or lower, or at any other interval, the contrapuntal formula having taken the place of natural harmonic feeling. In this sense the canon is an entirely different composition from the round, contrapuntal instead of rhythmitonal, retaining only the principle of imitation for its basis. It is further noteworthy that imitation in ecclesiastical music was confined for centuries to the canon in two or more parts, and that when the idea began to filter through into the ordinary contrapuntal usage, for a long period it was commonly used only for the starting of each voice one after the other, the parts directly afterwards meandering off in the usual promiscuous manner without further reference to the imitated figure of the opening. By this means, however, the idea arose of *imitation of units* instead of imitation of the complete vocal part from first note to last, and this proved the regeneration of counterpoint in the seventeenth and eighteenth centuries.

Imitation is a rhythmic principle, since it consists in repetition more or less exact, but compared with the clear reiterations of the idiom, it is a weaker because indirect and somewhat disguised rhythmic effect. In combination with time-idiom it may prove a valuable asset, but used in this manner it must be the imitation of a figure or at the most of a phrase-outline, and not of any larger unit. The smaller the unit, the more easily it will be recognised, the more frequent is likely to be the repetition, and the freer will be the tone-movement. Thus the unrhythmic canon, which has lost the vocal phrase and stanza of the round without

acquiring the rhythmic figure of instrumental idiom, begins to be merged into the fugue (originally only another name for the canon), where repetition of a subject (a prolonged phrase-outline) provides a unit of imitation. This is less unrhythmic than continuous imitation, and when the consummator of the fugue arrives in the person of Sebastian Bach the time-outline of the subject grows into a well-knit unit that admits of easy recognition by the ear. Moreover, in a few instances, the subject is actually broken up into figures, upon which the whole fugue is imitatively worked out, the complete subject seldom recurring after it has been once stated by each voice in the exposition. Beyond this point imitation could no farther go, having practically reached the stage where it merges into the time-idiom; the only difference being in the passage of the figure from part to part instead of reiteration in one part. The normal fugue, however, does not indulge in figure imitation, but is founded upon, and for the most part limited to, imitation of phrase-outline.

Imitation has been hitherto regarded as a movement in pitch, but when founded upon pitch-outline only it is a mere futility from the rhythmic standpoint. It has already been shown that for sequence or any kind of pitch-idiom to be effective it must be isolated in equal values. Pitch-imitation is decidedly less easy to grasp than pitch-idiom, because the ear has to carry the unit from one part to another. When, therefore, we find this obscurer use of pitch-reiteration not even combined with equal values, but existing in a promis-

cuous time-outline, it can have no possible rhythmic effect, and merely produces a sense of general pitch-similarity or absence of contrast if sufficiently worked out to have any effect at all. The rhythmic effect of pitch-outline came into counterpoint through the more obvious channels of sequence and tonality. But rhythmic effects of time-outline entered in by means of time-imitation, which is what one would naturally expect to find in vocal art, and hence the gradual shortening of the unit of recurrence from a whole piece to a phrase-outline or even a figure. This was the slow leavening of counterpoint by the rhythmic instinct.

We are apt to refer to the contrapuntal style as if it had been always one and the same, but there are in truth two modes of counterpoint, which tend to merge into one another though their extremes are distinct; the one is vocal, the other an organ style. It is the latter that contains the bulk of the familiar features of imitation and pitch-idiom which we associate with the term counterpoint. This is not an abstract conception, but a style called mainly into being by an instrument. It is not too much to say that, lacking the organ, this particular development of counterpoint would never have come into existence, so precisely does the style fit the instrument. Its subsequent transfer to choral music has somewhat obscured the issue, but a study of Bach's vocal part-writing side by side with Palestrina's, and Beethoven's in the *Missa Solemnis*, will show the differences between the true vocal style and the transferred organ one. The former

has none of the extreme rapidity of movement which is suitable to the organ but not so to a choir; it cultivates harmonic rather than imitative effects, which are reserved chiefly for initial phrases; in short, it is the style best suited to the choir, and the other is the style best suited to the organ.[1]

Imitation, to be continuously effective, demands balance of tone between the various factors. Its employment in the orchestra on contrasting instruments is useful for bringing out isolated fragments of melody, and is melodic rather than contrapuntal. Where the actual texture of the music consists of contrapuntal imitation, a homogeneous and continuous quality of tone is to be desired. The two things that specially characterise organ-tone, and, therefore, have conditioned the music written for it, are continuity and homogeneity. Exceptional continuity the organ has always had since keyboards became responsive to a touch of the finger instead of a blow of the fist, and its homogeneity was even greater at the time of Bach than at present. It is idle to conjecture what use Bach might have made of the present heterogeneous collection of orchestral stops, because they must have been useless to the contrapuntal style; and had Bach written in the rhythmitonal manner, his works would have been planned not for the organ, but for the orchestra. The orchestral stops are there for the purpose of orchestral imitation, and all the improved

[1] "The body of (vocal) sound used in performing Bach's church music is regarded as a vast organ, of which the stops are more refined and flexible and have the individuality of speech." (Spitta, "Life of Bach.")

facilities for registering point in the same direction. The organ has taken to itself orchestral colour, and has found means for the application of it; part of the instrument admits of a gradual crescendo;[1] in other respects it is the organ of Bach. Even its additions do not greatly detract from its homogeneity, for organ-tone is still too apparent for any trained ear to be deceived into mistaking a stop for an orchestral instrument. If a solo is played, the accompaniment, though varying in colour and force, is of exactly the same character as the solo, bearing not the slightest resemblance to a wind instrument accompanied by the strings. This is mainly because there can be no difference of attack and no accent upon the organ; the diversities of the orchestra lead naturally to divers uses of time-outline; on the organ there is but one generally suitable, that of equal outline. The time-figure may appear occasionally, but it takes a very subordinate place. The parts are all on an exactly equal footing, and therefore afford unrivalled opportunities for imitation. Effects of time being of necessity in the background, those of pitch take their place, and in Bach's organ music is found the apotheosis of sustained pitch-idiom and imitation. This is the essential technique upon which the fugue and its kindred types are built. Bach is to be regarded as the consummator of contrapuntal art, into which he introduced on the pitch-side somewhat of the license of a descanter,[2] and on the time-side the freedom of

[1] Mr. Hope-Jones' latest organ is entirely enclosed in swell-cases.

[2] Hence students entering for examinations are advised not to study Bach!

the rhythmist; but he is more than this, he is also the daring experimenter in idiomatic outline, although its most striking development was necessarily closed to him by reason of his contrapuntal habits of mind. Taking his work as a whole, nothing shows Bach's artistic greatness more than the fact that he limited his musical utterance to types of form which were absolutely in harmony with the style of which he was master. A lesser man would have failed in Bach's complete mastery of counterpoint for the purposes of utterance, and might have wasted himself upon fruitless rhythmitonal experiment. The result would have been the mongrel style only too common in music. It is the highest genius alone who can be called thoroughbred.

It is noteworthy that the original practice of imitation in the primitive round has come down to us virtually unaltered, except in the addition of further chords and in the lengthening out of its phrase and stanza. It remains still the only use of imitation that can be described as lingual as well as vocal. The words *en masse* are a nonsense effect, but each single part makes sense without the repetitions and elongations of syllables dear to counterpoint. The words are considered to be of importance, and are indeed an essential feature of the type, and out of the syllabic character of the word-phrase springs the musical time-outline. It is this lingual character that has given the round its popularity, and also confined it within its present limits.

In the case of vocal counterpoint, though words are sung it is clear that the essential forms of language,

and therefore for the most part its sense also, are disregarded. There is neither phrase nor stanza, for though what may be called a cadence articulation does take place occasionally at long and uncertain intervals (sometimes of over twenty bars!), it is only a pause in the proceedings, and has nothing whatever to do with the nature of the words employed nor with any point or direction of the tonality of the music. It is simply a casual cadence without any thought of phrase. This vagueness of construction characterises all the church-music of the period, and but little difference is to be found between the various ecclesiastical types. When contrapuntal elaboration threatened to override all bounds of lingual decency and order the Church protested, and even strove to abolish music from its ritual. The nature of the reforms effected by Palestrina consisted mainly in the restoration of some measure of sense to the language employed in the church-music.

In secular music, where the Latin of the Church was superseded by attractive poetic forms of the vernacular, the desire to give expression to the words necessarily introduced some measure of phrase-form and stanza. And in proportion as phrase-form began to come in to the *frottola*, *canzonetta*, *villanello*, and *balletto*, the popular Italian part-songs of the sixteenth century, counterpoint began to go out, the two being mutually destructive. It is clear that if words are being promiscuously repeated among a number of voices at the same time, all moving independently, that no possible effect of poetry, let alone mere sense, can be produced. When the poetic phrase

began to predominate it compelled the voices to move in blocks from chord to chord, and the part-song became only distinguishable from its modern equivalent by the nature of the cadences, which moved within the vague inflections of the modes rather than in the definite rhythm of the key. The poetic phrase invaded the whole of secular vocal music, not excluding the cultured madrigal, which had originally differed but little from the ecclesiastical motett. Perhaps the greatest charm of the madrigal is that it holds a delicate and ever-varying balance between counterpoint on the one hand and an articulate phrase-form on the other. Without being very strongly imitative there are some madrigals that are purely contrapuntal, and also a few that are merely part-songs, but the majority exhibit every shade of difference between these extremes in perfectly artistic combination. While phrase-form is sufficiently suggested to give effect to the words (usually of a pastoral or amorous character) the supreme beauty of vocal tone is never sacrificed. For the strength of vocal counterpoint, whether imitative or promiscuous, lies in its being a non-lingual style. It employs the voice for its tone only as if it were an instrument, using words as mere vocalisation, and developing its musical outlines unhampered by language. It is this that made the contrapuntal art of the sixteenth century a thing of beauty, though never a strong emotional utterance, for that can only be achieved by the instrumental idiom. The early instruments of the orchestra, dominated as they were by the vocal style, demanded

music that led inevitably in the direction of idiomatic development, and ultimately to its domination.

That counterpoint remained for the most part a strict and unemotional style, except when vitalised by a great genius, is due to the fact that in the first place, as already observed, vocal usage is naturally stiffer than instrumental, and that when counterpoint ceased to be purely vocal it developed its technique on the lines of the least expressive of musical instruments. Added to this were the stereotyping influences of tradition, a tradition that has perpetually mistaken the means for the end, and delighted in mere feats of technical ingenuity which are regarded as the aim and end of music. To such performances the art of counterpoint opened a wide playground, which proved in the earlier stages its weakness, and in the end its destruction.

# CHAPTER VII

## LANGUAGE AND MUSIC

The lingual period of musical evolution—The time-character of language compared with that of music—Word-songs and dance-songs—Inability of language to develop true musical form—Recitative—Phrase-form in music and language—Relation of the sense of words to musical form—Difficulties of the combination—Music an essentially non-lingual art.

THE influence of language on the evolution of musical form is a subject that no student of the art can afford to ignore. Music is vocal as well as instrumental, and vocal music implies words. When once the primitive stage is past, in which words are mostly meaningless and exist only for the purpose of vocalisation, the art of poetry begins to exert a powerful influence upon musical form. It is natural that vocal music should have the start of instrumental, because it is obviously easier to sing than to invent an instrument. In the one case the means of tone-production lie ready to hand, in the other a long phase of evolution is necessary to produce the means whereby an art may exist. Yet because of the inevitable introduction of language into vocal usage, the true independent art of music is instrumental, and, though late in its arrival, contains within itself both the essentials of the present and the seeds of the future. These elements existed in primitive art before the ascendency of language had begun, and remained for the most part in abeyance during what

may be termed the lingual period of musical development. It can readily be shown that language is opposed to the essential idiom of music.

Although innocent of bars and time-beats, to a certain limited extent it may be said that each language produces a musical time-character of its own. It is evident that the syllabic formation is an irregular kind of time-outline, and must influence to some extent this outline in vocal music. At the same time, the sound-side of language rarely forms effective musical figures such as are natural to an instrument, and there exists no definite syllabic repetition (other than the equality of poetic feet), such as is made by the reiteration of the time-figure in music; syllabic outline is vague and irregular compared with musical precision, having no foundation of strict rhythm, and is therefore destructive of the time-idiom of music. Accordingly we find that in vocal music an equal time-outline frequently prevails, or, if figures are found, the outline generally lacks the close reiteration of the figure necessary to its recognition as an idiom. It will be found throughout the whole of musical evolution that it is the rhythmic feeling associated with the dance in instrumental usage that develops a strong time-outline, and therefore an idiomatic style. Tunes based upon a recurring time-figure do not owe that figure to any verbal suggestion, but to unconscious rhythmical instinct. The figure is repeated, not because it fits the words, but because it is a law of nature that the figure shall repeat itself. When language replaces the dance, vocal music departs upon

a line of its own, developing lingual outline, until instruments begin to make their influence felt in the evolution of the art. In European folk-music we find all stages of the transition from voice to instrument. Instruments are still of limited scope, and there are dance-songs[1] as well as word-songs. It is not possible nor desirable to attempt a definite classification, for the two styles merge naturally into one another; but it may be taken as a general distinction that the tunes of clear time-idiom are dance-songs, and those of equal outline, with or without figure variation, are the word-songs. It may be said that, as regards the time-idiom of instrumental music, the influence of language is practically non-existent; and where language has had a hand in the making of vocal time-outline, the result is sometimes a freer phrase, but a still further stiffening of the naturally strict time-outline.

The connection of language with phrase-form in music is a very much more vital matter, for, as has already been shown, the phrase is common to both. But what is here peculiar to music is the circling rhythm which assists to articulate the phrase-form, and this has no parallel in language, nor is there any form of poetry which can of itself develop tonality in music.

A striking example of the helplessness of language in this respect is afforded by the nature of the would-be dramatic efforts to produce an artistic combination of music and poetry by the inventors of opera in Italy at the beginning of the seventeenth century. It is true, of course, that any form of art must grow, and is not

[1] Songs used in dancing, to which words form a mere accompaniment.

made all at once by a few enthusiasts bent upon a new contrivance; but if these composers had lighted upon a true evolutionary basis of development, their work would have achieved success on its own lines sooner or later. The rhythmic motive power lay ready to hand in the music of the people, but ignoring this, Peri and his followers, led astray by false analogies with Greek drama as to the relations of music and poetry, sought in effect to make the cart draw the horse. Rightly rejecting counterpoint as unsuited to their purpose, they found little but chaos left. In the music of culture there was neither idiom nor any circling rhythm on which to build, but only the articulations of unrelated modal cadences. Language came in and prescribed the outlines of the phrase-form, but circling rhythm was conspicuous by its absence, the essentials of melody were missing, and the result was that most dreary of all hybrids—recitative. Recitative, accompanied after the manner of a hymn tune that has lost its way, and this not as a link to bind together more interesting elements, but as the actual stuff of music! Had it not been for the later introduction of some essential musical elements—by Monteverde of orchestration, by Cesti and Stradella of melodic interest—it is unlikely that we should ever have heard of this curious attempt at musical form. Its value to posterity lies in its clear illustration of the fact that language (and this the most musical of all languages), having here a free hand and an unprecedented chance in the making of music, made nothing but an impossible kind of recitative.

The cadences of circling rhythm spring, like the

idiom, from the dance-song, out of simple alternation of tonic and dominant. When there are but two or three chords to be used, articulation must result from the reiteration; and where words are sung, the phrases of language will naturally assist to define what they are unable to create. The point where the word-influence is strongest is in determining the length of the phrase, and consequently the position of the cadences. This influence shows itself in a strong tendency to stereotype the natural free articulations of music into fixed formulas corresponding to those of language. But everything here depends upon the nature of the poetic form employed; a free irregular outline will ally itself naturally enough with music, but equal poetic lines tend to produce in music a very formal effect, because the articulation comes at regular intervals. On the other hand, as harmony grows and more chords are employed, and the general feeling for balance becomes stronger, in instrumental music less and less articulation is required.

Reasoning from the analogy of language, many writers have concluded that phrase-form, which is there never absent, is also essential to music; but this conclusion cannot be maintained. In an advanced stage of circling rhythm, articulation is unnecessary. Phrases are generally found, though not universally, but they tread upon each other's heels so that a new phrase begins in another part on or before the termination of the former one. In this case the essential purpose of phrase-form, which is articulation, is frustrated, since there is here no break in the continuity; and in much instrumental music no phrase-form whatever can be

found to exist, because the character of the music frequently demands an unbroken continuity.

The mistake above referred to has arisen from supposing that the constitution of music is similar to that of language, whereas, though many points of likeness do exist between the two, the fundamental development of music is, as has been already explained, of a different nature. And the nature of language differs further from music in that its phrase-form is, comparatively speaking, of a uniform character. From the actual word-outline apart from the sense, it would be impossible to judge whether an idea was being stated for the first time or developed, since the grammatical form would scarcely vary, and the sentence-construction would necessarily proceed much as usual, whatever was being said. In a musical score, on the contrary, a glance is sufficient to show whether statement or development of an idea is taking place, for this statement can be distinguished from development by the nature of the actual outline. In language we proceed from sentence to sentence, and new combinations of words are incessantly introduced, demanding the articulation of the sentence for their comprehension. In advanced musical form, once a clear statement of the principal idea or ideas is made, there is little further necessity for articulation, since these ideas themselves form the actual stuff of the development (which consists in a perpetual varying of the original statements), and are therefore easily recognised without being formally marked off from their context. The idiom is here all-important; there may frequently be phrases including

more than one figure, but in the great orchestral works of music a definite phrase-form is rarely insisted on for long, because it would produce a halting character, and destroy that continuity which is one of the greatest charms of the art. The practice of the great masters is conclusive in this respect. The clear-cut marking off of the original statement is perhaps nowhere more remarkable than in the opening of Beethoven's C Minor Symphony and of Wagner's prelude to "Tristan," while the "Parsifal" prelude contains a masterly statement of the main themes of the drama, each one distinctly articulated by pause and rest, a procedure which never occurs again after the development of these themes has commenced. If a phrase-form is found, that phrase-form is of the freest. The strict use of four-bar phrases is little favoured by the great masters, except in the "statement," where a prompt grasp of the rhythmic matter being essential, the most naturally obvious method is used. This if continued would become nauseatingly obvious, as is frequently the case in the works of lesser composers. But all the great rhythmic giants of music have given prominence to time-idiom and thrown phrase-form into its right place in the background, with just the amount of variation that will neither confuse nor bore the listener. This variety is endless within the length of phrase possible for the mind to grasp, and the only thing avoided is uniformity. If an irregular kind of time is used, such as $\frac{5}{4}$, the phrases become stricter in order to balance it. Never does phrase-form degenerate into the aimless ramble that is caused by lack of balance, nor the rigidity

due to want of rhythmic initiative, neither does it betray the self-consciousness due to intentional design. It is not trying to avoid being stiff, but is free by nature.

It is obvious that such freedom cannot possibly exist in vocal music where the poetic phrase-form is preserved. The setting to music of an even word-phrasing, poetic lines of equal length with a sense-pause at the end of each, must necessarily produce equal phrase-form in music, since it is obvious that the termination of the tone-phrase must coincide with that of the word-phrase. To avoid such monotony, irregular poetic phrasing should be sought. The poetry best suited in this respect for combination with music is either that of equal lines where the sense-pauses occur frequently in the course of the line instead of at the end of it, thus creating a freer use of phrase, or else where the line itself varies constantly in length and the poetic accents fall irregularly, as in most of Wagner's poetry.

So far we have considered only the sound-side of language, but its sense-form has also a definite relation to time-idiom. There is, unfortunately, in the combination a certain opposition between sense and sound. Language necessarily conveys its main impression, which is intellectual, through understanding, its secondary one through auditory sense; music, on the contrary, is purely emotional, and conveys all its impressions through the ear. Hence language when sung is continually liable to the reversal of its normal conditions through the influence of music, and once the sense vanishes it becomes a mere sound-peg for musical development.

No one can study vocal music without noticing the senseless manner in which its language is frequently employed. It is possible for a singer to have no intellectual conception whatever of the words of his song, and to be unable to arrive at their sense, unless he consider them apart from the music. So strong is this natural tendency, that if it be desired to enforce the sense of words in music, while giving the voice the chief melodic interest, song-music must be barred according to the natural accents of the poetry. Each sense-accent in the poetic line has to form the beginning of the bar, and there must be no bar-line in between the strong lingual accents, else superfluous sense-accents will be introduced into the poetry and destroy its effect. Exceptions may be made occasionally with syncopated notes or sudden rises of pitch on a weak part of the bar, but this is an effect of counter-accent of an opposite nature to the normal use.

For the composer of vocal music there are two courses open. One is to ignore poetic rhythm and sense for the most part, and use the voice boldly to the best advantage on its colour side, as has been done in choral art. This is an effect of absolute music of an instrumental character, the words suggesting no more than a general sense of atmosphere. The other legitimate effect is so to unite poetry and music that though both must resign something, yet each gains somewhat from the other. To music is added an intellectual interest, and to poetry an emotional force. It must be confessed, however, that in this combination music appears to lose the most. If poetic rhythm is to be

preserved as it must be, all the finest effects of imitative writing (purely musical effects) have to be renounced, for there can be no word-repetition, and the poetry must flow on in its natural course; therefore the chorus, if employed, is reduced to a simple time-outline corresponding to the poetic line. Modern attempts at mixing the imitative with poetico-dramatic effects are never a success, because they produce a hopeless confusion of opposite styles. There is the further drawback that music requires more than double the length of time for its idiom than does poetry. This difficulty can be to some extent provided against by using what is known as parallelism in poetry, a repetition of sense with variations of language, and also by providing frequent sense-pauses in the course of the poetry, which will allow of intermediate space in which to develop the time-idiom of music. The artistic combination of the two arts is an extremely difficult one to accomplish in a large work, and requires poetry specially written for the purpose.

It is evident that if elaborate choral effects are to be resigned, the musical interest is restricted to the solo voice and to instrumental writing. From what has been already said, it is clear that the solo voice cannot advantageously carry on a time-idiom; yet this being the essence of music, when ably worked out must attract the chief attention of the hearers, because it is the main source of imaginative musical utterance. Either the idiom must disappear altogether, in which case there will be no strong purely musical interest left, or it must be carried on in instrumental parts indepen-

dently of the vocal ones. The latter is exactly what has happened in modern music. Wagner, however he might desire to enforce his drama and his poetry, was powerless to avert the natural consequences of cause and effect. Time-idiom can be nowhere but in the orchestra, and wherever time-idiom is, there is the main musical interest. The passing of a generation has proved the fallacy of Wagner's theories and the correctness of his musical practice. His music holds its own in the concert-room, innocent of the vocal parts which the orchestra was supposed to accompany, but even a Wagner enthusiast would not desire a performance of a Wagner opera, or any portion of it, given with the finest singers and without the orchestra.

If we admit poetry as the equal partner of music, good results of the combination may be obtained, but the finest in music will not be reached. This is only found in purely instrumental art, or where the verbal effect of vocal music has sunk into insignificance, and the result is absolute music though words are sung. This is the case in the primitive dance tunes, out of which the modern art has evolved. We are thus brought back to the statement that in the orchestra lies the future of music as an independent art, and the vocal style, if it is to take part in this further development, must ignore poetry and revert to purely musical conditions.

# CHAPTER VIII

## IDIOMATIC DEVELOPMENT

The type of the dance-song—Evolution of circling rhythm from melody to polyphony—The birth of modern music—Principles *versus* types—Text-book formulas and contradictions—So-called second subjects—Omission of the idiom from theory—Outlines of analysis—Evolutionary nature of tonality.

In tracing the natural evolution of music out of the folk-period two distinct lines present themselves, both governed in the first instance by stanza-form. The one owes its origin mainly to the dance, the other to the ballad.

The music of the folk-dance, as we know it, is usually a simple tune of a single stanza, which is repeated as often as required. Sometimes the full close at the end is omitted in order to lead back more easily to the beginning, and this shows the natural rhythmic instinct of the dance for continuity, and consequent desire to be rid of the full-stop of the stanza. The repetition of some clearly defined figure at the beginning is sufficient to indicate the point of reiteration. In another case the dance-tune will complete its stanza with one or more repetitions, and then proceed to a new stanza, repeated in like manner until a return is made to the first. In this simple beginning lies the germ of what is generally known as the Minuet and Trio, and also of all the types grouped under

the head of Aria and Song, the principle of which is (1) statement of one idea; (2) statement of a second idea; and (3) restatement of the first idea, with probably a slight prolongation known as the coda added to round off the whole. The sole difference between the popular and the cultured type is that there is more of the latter. We find, perhaps, double or treble the number of phrases, with corresponding variety in the cadences, a longer coda, and the rhythm of the key-circle called in to provide tonalitive contrast that will emphasise the difference between the two ideas. The second idea is probably in the key of the dominant, and this necessitates a longer treatment than the centering tune of the folk-dance. But as if to show that tonality is not considered to be a sufficient means of contrast in itself, at this stage the same idea is not repeated in another key, but the new key is the natural complement of the new tune. This simple foundation has always been, and still remains, the most useful of all musical types on a small scale. It may be developed till each part contains several stanzas and a modulative outline within itself, provided the essential principle of contrast in the middle section be maintained. Its general character is melodic rather than strongly idiomatic, for though figures may be found and even an idiom may be traced, as a general rule the phrase and stanza-forms are well pronounced, and this indicates the subordination of idiomatic to melodic interest. This type of form, when taken at a slow pace, is usually of a cantabile and expressive nature. In rapid movement the time-features tend to pre-

dominate, and the Scherzo character appears. The Minuet stands half-way between these two types, and has in its cadences something of the formal precision characteristic of the society dance.

Taken as a whole the type exhibits a small circling rhythm in process of formation, which, once brought to perfection, can get no further, and consequently disappears as a factor of the later development. This is an inevitable part of musical evolution. Melody, being by nature a small type of form, must arrive at a comparative perfection while harmony is still restricted to half-a-dozen chords. At this stage melody is the vehicle of circling rhythm, reinforced by harmony expressed in definite cadences of limited scope. But as tonality develops and seeks a larger field, its tendency is to break the bounds of the formal cadences of melody and find its natural outlet in harmony. Thereupon the cadences begin to melt away into continuous chord-movement, and the formal outlines of melody vanish also. Thus the melody that belongs to this wide harmonic range is necessarily of a different character from the small independent type. It has a far greater harmonic adaptability, and since it is now no longer cut up into small fragments by cadences, it offers opportunities for free polyphonic treatment. But lest there should be (as frequently has been the case) an over-balance in favour of the factor of polyphony, the balance is adjusted by the natural predominance of time-idiom, which is now able to make itself felt as a factor of surpassing interest, unchecked by the formalities of the cadence. Circling rhythm is trans-

ferred to harmony, and melody, resolved into the pitch-idiom, becomes of interest for its idiomatic and undulating characteristics only. In this way a pliant style is produced of an entirely different texture to the smaller stanza type. It is mainly this difference of texture (idiom and polyphony replacing melody) that distinguishes the later stage from the earlier.

This new texture of musical material begins to show signs of developing itself in Haydn's work, and is scarcely to be found in that of his predecessors, all of whom were more or less influenced by contrapuntal training. Haydn, we find, was in the matter of composition self-taught, of peasant birth, and familiar from babyhood with the folk-dance. Exactly at the time when his development as a composer required it, he was completely isolated from the rest of the musical world and carried into the wilderness by his patron Esterhazy. Owing to the lack of means of communication and transport, in those days the wilderness was the wilderness. Haydn was thrown entirely upon his own resources, and forced to be himself, since he had no one to imitate. A band at his disposal supplied him with the means of hearing and testing his orchestral effects. These were ideal conditions for natural music to grow in, unhampered by the swaddling-clothes of counterpoint.

These facts sufficiently account for the appearance at this particular period of what has since been generally recognised as the birth of modern music. It was simply that music had at last found a congenial soil and atmosphere. That the new style did not die with

Haydn, but was taken up by his contemporaries, shows that there was that in it which appealed to their natural musical instinct. Bach had accomplished in counterpoint all that man could do, and a change was welcomed; but it must have been a change of the right sort that could have lured musicians so completely from the time-honoured paths. There was no deliberate and conscious intention of making something new, but the expression of a rhythmic force pushing its way out into tone-imaginings, both destroying and creating anew. All music is dependent upon the instruments of its utterance—firstly, the instrument of the imagination; secondly, the instruments of the actual tone. It is when the right mind and the right means come together, the initial imagination, then the players with their instruments, that a sudden and startling advance takes place, an advance that, without regard to the long and silent storage of force preceding it, might appear of the nature of a miracle.

We are commonly told that at this period of special grace arrived all the form of absolute music, a series of types of absolute beauty representing a standard that later generations ignore at their peril. Setting aside the extreme unlikelihood, not to say impossibility of such a general proposition, one might point out that no great composer has ever reproduced the style of a predecessor without transforming it almost out of knowledge, and adding thereto much of his own. Reproduction in art means stagnation. An age that has life in itself will be absorbed in seeking its own outlets, not in copying the work of its predecessors.

What is eternal are the principles on which form is built; what is mutable is the form itself.

That the name of a special type of form survives long after its actual nature has undergone transformation does not check natural evolution, but may deceive the unlearned into supposing that they still possess the thing to which the name was originally given. Thus the term "sonata," as first applied by the Italian school of the early eighteenth century to a solo composition for violin with harpsichord accompaniment, had scarcely anything either in its texture or matter to suggest what is now generally understood by the name. These labels are thus frequently misleading, because they are made to cover many various types of form. When we are once past the early stage of tonality, and the cadence has ceased to be essential, the tendency is at once to greater variation, and to produce types of form that merge into other types, which it is well-nigh impossible to classify with any approach to accuracy. That much classification exists already is due mainly to the superficial method of analysis which has hitherto prevailed. It is evident, if we select only a few features out of many, and these the less essential, and proceed to classify as if they represented all that there is to know, that the thing can easily be done. When it is accomplished it may be a convenient formula wherewith to dose the young, but as the intellectual summing-up of what does actually exist it would be ludicrous, were it not so essentially false. With idiomatic development comes naturally a greater freedom and elaboration of subjects, complex variations

meet us at every turn, and to analyse with any completeness a few of the greatest works in music from this point of view alone would fill volumes.

Possibly for this reason educational text-books and primers are given to passing lightly over the matter, presenting analyses of the sonata-type somewhat after this manner:—

Exposition — First subject: Bars, 1–13; bridge-passage, 13–49; second subject: 50–66; codetta, 66–81; free fantasia, 82–129. Recapitulation—First subject: 130–142; bridge-passage, 142–174; second subject: 175–191; coda, 191–229.

It is evident that the above formula, presented as an analysis, conveys about as much idea of the character of the movement as might be gained of the aspect and style of a house by a careful counting of the bricks in its several walls. Unfortunately, when once this method of dealing with "form" has been acquired, teachers and students are only too prone to rest satisfied that this is all there is to know. And since the assumption is negatively acquiesced in, if not actively encouraged by standard instruction books, who can blame them?

The line of reasoning upon which such analysis is founded appears to run as follows: There is a first subject, and there is also a second subject; the second subject is in the key of the dominant; therefore, the first subject once stated, as soon as the dominant key appears, there is the second subject; if the first subject chance to modulate to the dominant, it is no longer the first subject, but is now part of the second sub-

ject. Further, there is a development section; in the development section the first subject is developed; therefore, should it appear to develop elsewhere, this is no longer the first subject, but it is a bridge-passage, or, it may be, the second subject. As well might one reason thus: Should an Englishman go to France he is now a Frenchman, because at this moment there are no Englishmen in France. But haply, if he travel *at another season*, then he is still an Englishman. We are but mad "north-north-west."

Such considerations do not disconcert the authors of musical primers. First subjects masquerade in their pages as second subjects, or as "missing links," and nobody so much as scents a joke. Even if the dominant key make its appearance *in the middle of a phrase*, there begins the second subject. As well might an author start a chapter in the middle of a sentence. It is clear from the text-books that Beethoven did not know what he was about.

This fatuous theory, as might be expected, breaks down in practice.

Dr. H. A. Harding ("Analysis of Form") analyses thus the opening of the first movement of Beethoven's Sonata in A Major, Op. 101—First subject: 1–4; connecting episode, 5–16; second subject: 16–25; coda, 25–33.

Mr. W. H. Hadow ("Sonata Form") describes it as follows:—

"Its first subject is a melody in A Major with a deceptive cadence; then comes a bar of transition modulating to E, then a second subject (beginning

with the last chord of bar 7 and ending with the first chord of bar 33)." This amounts to—First subject: 1–6; transition, 7; second subject: 8–33; but one bar of connecting episode, a second subject in another place altogether, and no coda.

A movement of this type is described by some writers as binary, by others as ternary, and these are names supposed to represent entirely different species. The Adagio of Beethoven's Sonata in G, Op. 31, is said by Dr. Harding to be a rondo; according to Mr. Hadow it is a simple ternary type. Other instances might be named.[1] These are all important points, and cannot be set aside as matters of detail.

Under these circumstances how is the unhappy student to decide? Probably, and wisely, he will give it up as hopeless.

The cardinal error in such teaching lies in the emphasis given to the transient and secondary features of a past age. What was merely a phase has been made the essential condition. In the sonata-type of Haydn and Mozart the first and second subjects were actually blocked off by cadence and pause; the dominant key coincided with the entrance of the second subject; on this point no doubt could exist. In Beethoven's style appears a continuity peculiar then to himself, and these formal outlines disappear. Hence the dilemma of the theorists when they persist in endeavouring to explain a Beethoven sonata by means of the obsolete formulas. It is an attempt to make a

[1] See Macpherson's "Form in Music," p. 132, and compare with Harding's "Analysis of Form," p. 62.

strict tonalitive development appear the sole underlying cause of the sonata-type, to say that this is, in effect, an affair of keys, tonics, and modulation in the first place, and of ideas only in the second place.[1] The sooner it is understood that the tonalitive conditions of the sonata-type were the *result* and not the cause of its existence, the better for the understanding both of the sonata and of more recent developments. To the old-fashioned formulas the present generation of composers will have nothing to say once past its schooldays, and rightly, for these things have no bearing upon the essentials of music. Nor, as has been shown, can they in themselves explain the type they are supposed to summarise. The essential principle is omitted, the vital principle to be found in all rhythmitonal music of whatever age or nation, the reiterative outline of the idiom.

Whether there is one subject or two, whether one secondary subject or many, whether these occur in the key of the dominant or in some other key, these are points that might assist us in determining the exact position of a work in the evolutionary order, were there any doubt on the point. But since we are now well within the historical period, such investigations are superfluous, and, from the point of view of practical analysis, they suggest an entirely false standard, because they are secondary considerations.

To any one who has mastered the elements of music there will be no difficulty in knowing at once

[1] "The primary fact in musical structure is key-distribution" (Hadow, "Sonata Form," para. 4).

what chords are used, what keys are employed, where cadences occur; this is the mere grammar of the art. When we are reading a poem, we do not stop to consider its grammatical formulas unless there is something wrong about them which invades our attention. In like manner should all great music be studied, and it is entirely useless to analyse inferior compositions, which depend upon sensuous effect, and are lacking in the higher rhythmic development.

The essential thing is the following out of the idiom; this will reveal the true balance of the work. It will serve to indicate the purpose and the relations of the various climaxes, the outlines of the undulating rhythm that, along with tonality, exists for the purpose of developing idiomatic utterance, the manner in which close reiteration will lead up to a climax of feeling that subsides again into the serenities of equal outline; the contrasts afforded by the juxtaposition of varying ideas heightened by effects of orchestral colour, of modulation, of chromatic harmonies, of force-variations. All this and much more will be grasped by a conscientious and thorough examination of the precise time and pitch formation of the ideas and their manifold transformations and ramifications in idiomatic treatment. And when we have thus pierced to the core of musical form, it does not seem to matter greatly whether we call it sonata, symphony, symphonic poem, or by any other name. Provided the true rhythmic utterance is there it will justify itself to the understanding, and if it is not there, there is nothing worth looking for. In the end, it will always

be found that all music which makes a great and a permanent impression upon the imagination reveals a complex development of this nature, marvellous to the intellect which thus from its own standpoint confirms and ratifies the intuitive impression. To artists, there is no need to enlarge upon the value of such an experience.

In order to estimate rightly the work of any composer, we must take into account the exact conditions of rhythmic development of the material of the art which prevailed in his lifetime. These must necessarily limit his utterance. For instance, when tonalitive perception is at the stage where the central key requires much insistence, and admits only of mild contrast without loss of the circling rhythm, obviously modulation will be limited, and a large proportion of the composition will be devoted to the centering outline. Hence a tradition grows up that these exact tonalitive conditions are the only right ones, providing a pattern that all the weaker brethren hasten to copy. Presently comes along a genius who breaks the traditions and introduces a new balance, less centering outline and stronger contrasts, and this again in its turn creates what is called a "form" and sets up a tradition. The second composer may or may not be greater than the first; that is a matter, in the first instance, of rhythmic initiative; both may have equally broken down traditions and thus enlarged the scope of idiomatic treatment. But the second starts from a larger platform than the first, and this means greater emotional possibilities

because a wider technique. In the earlier stages of tonality coherence and placidity go hand-in-hand. If one key is much dwelt upon, as then it must be, repose ensues, and this the strongest idiom is unable entirely to counteract. When stanza-form gives way to the looser framework of the idiom it is not nearly so easy to grasp the circling rhythm, unpunctuated now by the cadence-articulation. Hence the insistence upon the central key, the establishment of this by a mild form of contrast associated with another subject, the grouping of modulation into one place in the middle, then the recapitulation of all the first part in the central key only, the familiar tonalitive scheme which characterised the sonata-type of Haydn and Mozart. Without some such definite formula in which to expand their idioms composers would have lost their way at this period, but as the perception of circling rhythm ripened, it became no longer a need, but a convention. Having served its purpose, it vanished into the sonata-type of Beethoven. Practically nothing is here retained but the modulations of the middle section, and the recapitulation of the close, the identity of which is generally disguised by considerable alteration and a long coda. The thing that links these two examples together and justifies the application of the same name to both is the idiomatic treatment. This has expanded in all directions and gained enormously in emotional power, involving contrasts and climaxes impossible to the earlier stage. But there can be no doubt that we have still here the identical idiomatic outline, emphasised and

strengthened by the character of the mind that now employed it. At the same time, though the nature of Beethoven was doubtless a far deeper and more passionate one than that of Haydn or Mozart, this nature alone does not account for all the difference in his compositions. Tonalitive perception, in general, had reached what made a point of departure for one mind of prodigious strength to embark from; but for that starting-point the final goal could not have been reached. But for the development of tonality, the ideas could not have been thus uttered.

And this goal was final only for Beethoven. So far has our sense of tonality grown, that Beethoven's tonalitive scheme has become in its turn a convention. There is now no need to pack the bulk of modulation into the middle part only, and admit long spaces of exact recapitulation in order to define tonality. So keen has grown our sense of the central key that, when once stated, suggestion and occasional reference are all that is required. Less and less has tonalitive coherence to be considered, since it has become an obvious thing; the repose of the key is emotionally just as effective, nay, more so, because there need be no more of it than the emotional nature of the work requires; orchestral instruments no longer confine modulation; there is unlimited scope for idiomatic development. In the idiom alone lies the link with the past and with the future.

# CHAPTER IX

## DERIVED VOCAL TYPES

The folk-ballad—Origin of the rondo—Mixed types—The rondo in the East—The European rondo—The variation type—The early Welsh type—The middle stage—Final development into idiomatic outline.

THE line of development that takes its origin from the folk-ballad is even more closely connected with stanza-form than the line that originates in the dance. As already observed, language cannot make a circling rhythm, but undoubtedly it does suggest a phrase-form, and it leads to the articulation of the stanza. When once the small tonalitive type of melody which usually accompanies the folk-ballad has been evolved, its further development offers opportunities of a different character to those of the folk-dance, and these arise mostly out of its alliance with language.

The folk-ballad consists usually of a number of verses or stanzas of equal length. To all these verses one tune is repeated, with or without slight variations. These variations arise out of the varied syllabic formulas, but still more so from the character of the story which is generally a feature of the song. The events of the tale will demand now rapidity of utterance, now a deliberate slackening; the special words to be emphasised will vary in each verse, even the pitch-outline of the tune may be altered to suit the character of the words. The peasant singer does all this naturally and

unconsciously, intent upon his tale, and instinctively adapting his musical utterance to the emotional character of his text. Considered as a folk-song only, this is a type complete in itself, and that admits of but little advance upon vocal lines.

The cultured song which has different music to suit each verse (*durch-componirt*, as the Germans have it), does not develop out of the ballad, but is a vocal rendering of the folk-dance already considered. Its basis is statement, contrast, and restatement; and this is a fact so completely recognised that the name song-type has come to be applied to it. Upon this all the modern varieties are built. It is necessary to take into account the cross-currents and borrowings of vocal and instrumental music in order to understand their respective developments.

The type known as the Rondo seems to be an instance of mixed origin. It involves several recurrences of the first idea, with contrasting links in between. Thus it may have developed out of the simple dance-song by addition of another contrasting idea and further repetition of the opening subject (involving five divisions instead of three), but it seems to be more accurately accounted for by the refrain or burden which frequently concluded each verse, both of the folk-ballad and of the choral dance. The repetition of the same words naturally called for repetition of the same tune, or it is again possible that the desire to repeat the tune called for the same words, which are often mere nonsense. Recurrence is less essential to poetry than to music; therefore the idea of the rondo may well have originated in the

choral dance, afterwards owing some of its development to the ballad, and at a later period, when the music of the dance had grown beyond two ideas only, becoming an instrumental dance-type.

It should be borne in mind that two statements only of an idea do not constitute a rondo as generally understood, and to apply the name rondo to the primitive dance-song destroys a clear distinction which undoubtedly does exist. The essential idea of the rondo seems to be varied alternation, one factor persisting and the other changing; and this is not the same thing as alternation of two similar factors throughout. This must sooner or later involve monotony, whereas the rondo is continually introducing new ideas, without losing hold of its original theme. It is therefore a type freer, more highly organised, and hence less primitive, than strict alternation of ideas.

Equally distinct from the rondo is the type that, after one repetition of each stanza, or perhaps without repetition, goes on continually to something different in the next stanza. In this case there is nothing but similarity of key, and a general resemblance of style to preserve unity. This is usually combined with words, which assist to hold the movement together, as in the English glee and the modern part-song. In the music of the Byzantine empire, this rambling character is found also in instrumental usage in the modern Turkish *schiarky* for the piano. This music is, on its pitch side, a somewhat unsatisfactory mixture of European and Asiatic characteristics, in which harmonic tonality and a highly elaborate modal scheme

appear to strive for mastery, each thwarting the other. It is a mongrel species of low rhythmic development, and considering that the Turks have not hitherto shown themselves an artistic nation, this is scarcely surprising.

In India and China the true rondo type appears in the actual ballad. A popular Hindu ballad opens with the theme (called *pallevi*, two bars in length), which recurs after each stanza, usually about six times in all. The stanza-form is irregular, one example being as follows: Bars (without theme repetition) in each stanza: 2.8.4.8.6. This, including the theme repetitions and two introductory bars leading from it to the first contrasting stanza, makes a total of forty-two bars.[1]

In a Chinese ballad example the theme, two bars in length, is started on the orchestra (a collection of guitars and pipes), and recurs twice in alternation with the voice, which has phrases of varying length; the whole of this is one stanza, and, when the voice has concluded on a long note, the orchestra comes in with four bars of melody, more or less in imitation of the vocal part, before it recurs to the rondo theme. Time-figures appear and assist to unify the ballad, but its essential unity is due to the reiteration of the tune. Here the orchestra provides the persisting factor, the voice the changing ones. There are said to be no fewer than forty-eight stanzas in this particular ballad, so the audience would have heard plenty of the theme before it was done with.[1]

In all Eastern music, owing to the absence of har-

[1] See Appendix, Section Y.

mony, the cadence is frequently indefinite, phrase-form is articulated by rest, and stanza by special emphasis and pause on the last note. Nothing in the exact nature of the European block stanza can exist, and this appears at first to add to the indefiniteness of Eastern music, notwithstanding its fundamentally coherent and intelligible basis.

The European rondo is an instrumental type remarkable for the precision and regularity of its cadences. Bach infused into it the free flow of counterpoint, but this was but a passing phase, for Haydn and Mozart reverted to the distinctly articulated type that had been well established by Couperin in his harpsichord pieces. With the development of the idiom the rondo became freer and larger, and its various sections began to mingle with one another; but substantially the same type persisted, and it has remained one that grows by addition rather than by process of idiomatic development. It has generally been associated with some rapidity of tempo, and has now an air of simplicity, compared with complex idiomatic treatment, that suggests its folk-origin.

The music of the folk-ballad, devoid of refrain, has been also transferred to instrumental art. Under the names of Variations, Chaconne, Ground,[1] Doubles, &c., it has a long pedigree, and was the first natural type of form to be cultivated by European musicians. Fundamentally it is a melody, repeated with variations suggested originally by the vocal variations of the ballad. Once this type had dropped its words by transfer to

[1] A ground was continual repetition of the bass of one phrase or stanza.

an instrument, the need for greater variation in the melody became at once apparent, since the element of variety supplied by the ballad story disappeared. But the primitive characteristic remained, and distinguished it from the rondo. Instead of introduction of a new melodic idea, the same melody formed the foundation of the whole movement, and its phrase and stanza were exactly repeated. In later times the manner of variation differed greatly, and it might be the bass or the harmony that made the unit of recurrence; but whatever that unit was, it recurred with its cadences in exactly similar positions; and this division into well-defined and equal blocks, the matter of which was constantly repeating itself in differing ways, is what characterises the variation-type from first to last. This precise and formal nature, combined with a usually centering outline, commended it to the early English composers, who in their virginal[1] pieces used little else, with the exception of the contrapuntal prelude. The texture of the movement admitted of some adoption of the customary contrapuntal manner, and assisted the use of imitation when a popular melody was taken as the theme, but its reiterative stanza character was entirely opposed to the unbroken flow of counterpoint. At this time (the sixteenth century) it was a useful compromise between popular and scholastic ideals, though its method was rigid. This, however, is by no means the first appearance of the variation-type in notation.

Reference has already been made to the Welsh school of the twelfth and thirteenth centuries. The

[1] An early keyed instrument, preceding the harpsichord.

standard instrumental music of the Welsh was founded upon the variation-type only. Originally indistinguishable from vocal music and governed by the twenty-four measures (or metres) of poetry, which was called "song of the voice," instrumental music became recognised as a separate art by order of the Prince Gruffydd ab Cynan, and was called "song of the strings." Musical degrees were instituted, and students had to study many years to obtain the highest distinctions of the bards. In order to establish some basis of musical form apart from poetry, twenty-four measures of music are said to have been introduced from Ireland, and as the names of the measures are not in Welsh but in ancient Irish, this appears very likely. The Welsh have always shown independence in music in their rejection of the Gregorian style, but the Celtic music of Ireland must naturally have been closely allied with their own, and similar methods would commend themselves to both countries. The foundation of this music was harmonic and not melodic, apparently for the simple reason that whereas harmony (especially in a primitive stage) admits of easy classification, with melody this is far more difficult. Welsh music shows no lack of melodic instinct, but its theory, based upon that most primitive of harmonic usages, alternation of tonic and dominant, consisted of the measures, already described, which were from one to six bars in length, with a chord on each beat. Four-beat time was the most frequent, but three-beat is also found, and change of bar occurs, as also change from dual to ternal time. The phrase of the measure, commonly of

four bars, usually begins and invariably ends on the tonic chord. The chord-succession of the measure is repeated throughout the variations. Above it appears one part consisting of some simple pitch-figure constantly reiterated with occasional synchronous consonant intervals, and what is usually called the theme does not differ greatly in form from the variations. At the same time each variation has a distinct character, for whatever pitch-figure is chosen distinguishes it throughout, and usually forms an idiom. Syncopations appear sometimes, but for the most part equal time-outline prevails. Thus there is little of time-idiom to be found. Celtic imagination runs rather to wealth of decoration than to the definite utterance of the time-idiom. What is generally known as ornament in music consists of shakes, trills, grace-notes, and turns, too rapid to have any idiomatic significance ; and this Welsh music had an extensive set of signs to this effect used incessantly, the exact reproduction of which can only be guessed. Upon this decorative principle the interest of the variations chiefly depended. It is a very primitive type, as appears from its monotony, but it is of great interest as indicating a stage in the evolution of music that has scarcely been known to exist.[1]

The drawback of the variation-type, found in it from the Welsh music onwards, lies in the ease with which it adapted itself to any kind of superficial triviality. It became all things to all men—to the Welsh decorative, to the English contrapuntal, to others melodic and harmonic, but to none of these the true musical utterance

[1] See Appendix, Section Z.

of great art. This is perhaps not surprising, since technical ingenuity was the thing required of musicians, and spontaneous utterance was regarded with suspicion. There is something almost pathetic in the frequent borrowings of composers of all nations from folk-song, showing their instinctive desire for what they themselves were unable to create; and when a borrowed tune superficially decked out made the essence of the variations, necessarily these took the name of art in vain. The type had all the littleness of the folk-ballad in an attenuated form, without any of the breadth possible to the independent contrapuntal style. It was at once limited and monotonous and yet spun out at great length, and there existed no proportion between its duration and its tonality, since one key was usually employed throughout. Deprived of the natural consecutive interest and relation of parts to a dramatic climax which is usually to be found in the ballad, it was a mere string of loosely connected units, because the feeling for undulating rhythm in music on a large scale (which takes the place of what is called dramatic sense in literature) arrived very late, and had to wait upon the growth of the idiom that alone made it possible. Pitch and time idioms are found in the variation-type, but pitch mostly predominates, and neither can develop fully because of the cadence block continually recurring. So long as the stanza-form is held intact, all that can be done is to have as long a stanza as possible, and while the tonality is so limited, to make variety by means of imitation and the idioms. This Bach, in his chaconnes, was able to do by means of his astound-

ing mastery of imitation and of pitch-idiom. In his variations harmonic outline is, as with the Welsh, the unit of recurrence; but unlike them he forms a string of complete little movements hung on the thread of the harmony, each of varied emotional interest. Thus the variation-type began to take on a human character, and to come to its own as a musical utterance. In the sonata period more ease and freedom were infused into it, and, in the hands of Beethoven, it becomes at length an even freer movement than its companion, the sonata-type. Instead of the formal and stiffly divided reiteration of one theme, the cadences for the most part fall out or are rendered inconspicuous, subsidiary themes appear in other keys, and while the main theme is varied and transformed in every conceivable way, the whole works towards a climax to which every part of the movement bears its relation. The stanza-form can now scarcely be found if it is looked for, and has entirely ceased to obtrude itself. This extraordinary and sudden transformation of a type that had existed for so many centuries almost untouched is due to the same causes that developed the sonata-type out of the primitive dance-song. The essential personality of a composer, which cannot be freely expressed until a corresponding freedom has arrived in the means of expression, is the transforming influence; and the freedom of the means consists in the development of rhythm as a whole, and especially of musical idiom.

Thus the folk-ballad by its long road, and the dance-song by its seemingly short one, arrived together at the same goal.

# CHAPTER X

## THE CYCLE

Anomalous cycles of opera and oratorio—The Mass—Ordered sequence of the suite—Early French dance-types—Tonalitive scheme of suite—A cosmopolitan cycle for the harpsichord—The modern suite—The greater cycle—Reversal of time and pitch characteristics of suite—Influence of instruments—The early sonata a combination of differing types of form in a small balance—Development of larger balance under Beethoven—Undulating rhythm essential to unity of a great musical work—Unity of subjects—The quartet.

THE Cycle is a succession of several movements grouped together under one head. Whether this succession presents (1) a string of disconnected movements; or (2) an ordered sequence; or (3) one single conception in which each part is essential to the balance of the whole, the result is still considered to be a cycle. Between the mere fact of succession and the artistic whole there are all shades of variation to be found, and these variations depend entirely on the use made of units of recurrence.

The desire for the cycle arose when unity on a small scale, that is, within the limits of a small movement, was understood, but unity on a large scale was unthought of. What was wanted was greater length, but how to fill these greater time-spaces puzzled the composer of limited imaginative power. The day for unwearying repetition was past, and musical types, with the one exception of the variations, were very

short. The problem was solved by falling back upon language to supply the factor of unity required; a dramatic tale presented in secular or sacred guise on the stage was the origin of the musical cycles known as Opera and Oratorio. As soon as music had recovered from the recitative phase of the early seventeenth century, both the opera and oratorio settled down into the cycle, a heterogeneous succession of airs, choruses, ballets, and little instrumental interludes called ritornelles. Where the story would not lend itself to any of these types it fell back upon recitative, which became thus a useful though no longer the most important feature of the opera. After a time oratorio left the stage for the concert-room, and developed itself upon less dramatic and more musical lines, but its cyclic character changed for the worse. Its choruses became under Carissimi, and later under Handel, more contrapuntal, its arias more florid; accompanied recitative also made its appearance, and if we except the choral works of J. S. Bach, who infused a contrapuntal character and therefore a unity of style into everything he wrote, oratorio was and is a hopeless anomalous mixture, not only of differing types, but also of differing styles. It is least unsatisfactory when the dramatic story, if there at all, is filtered down into moral or pastoral reflections which offer some scope for counterpoint. Its popularity is due largely to its religious associations, but as a cyclic whole it lacks form, despite the frequent virtues of its factors separately considered.

On the other hand, the movements of operas were

generally discreditable as music, filled with superficialities that would show off the charms of the solo voice, or the decorative arrangements of the stage. In opera as a whole there was less anomaly, because it did not lend itself so well to contrapuntal methods, but there was far more superficiality. Considered as a union of arts, the need for musical display in a series of fragments spoilt the drama, and the drama itself was an encumbrance to the music. The attempt to supply the place of musical unity by means of the dramatic unity of a story was not an artistic success. The operatic cycle had no form at all in the rhythmic sense, but remained a mere stringing together of unrelated parts. Musical reiteration of some sort is necessary to musical unity; a reiteration not merely within the limits of each part, but carried on throughout the whole. This in opera is conspicuous by its absence; hence the lack of unity and also of contrast, which are the essential conditions of form.

The Catholic Mass, though certainly a cycle, is not an easy one to define musically. Its unity is fundamentally literary, admitting of many diverse musical interpretations. In the course of a long history, it seems to offer examples of almost every musical style that has ever existed in Europe. It gave birth to the vocal contrapuntal style of the sixteenth century, which must be regarded as specially belonging to it, and nevertheless it has proved an inspiration of the highest order to later contrapuntal and rhythmitonal composers. Again, it has been merely a peg for superficial music of the operatic stamp. Under its

many guises it comprehends the whole range of cyclic variation; its sequence of movements is now anomalous, now orderly, in the hands of genius rising at times into the unity of the balanced whole. The fact can never be overlooked that the two greatest choral works of music, the masterpieces of Bach and Beethoven, are founded upon the Mass.

The first cycle of instrumental music was that known as the Suite, which belonged to the seventeenth and early eighteenth centuries. It was written for the harpsichord, and consisted of a string of little movements in stanza-form all in the same key and on the same tonalitive scheme, each of which was called after a favourite dance of society. With the name the resemblance to the actual dance ceased, if we except a certain convention which was in force prescribing the time-signature proper to each, and which may very well have arisen from the original dance-movement.

It is a question whether the debt owed by the suite to dance-feeling has not been altogether overestimated. As far back as the thirteenth century, instrumental pieces were written for the viol or vielle on the lines of dance-tunes, showing the influence of the society dance upon instrumental music at a very much earlier period than is commonly supposed. The rage for dance-tunes was no sudden incursion of the sixteenth century. In his interesting monograph[1] M. Pierre Aubry shows that the name *estampie* (Provençal *estampida*) was given to a melody for the viol of clearly defined phrase and stanza-form, and that it

[1] *Estampies et Danses Royales.* Pierre Aubry.

must have been one of the commonest instrumental types of the thirteenth century. It differed little from the *Dansse real* (royal dance) except in being of a stricter type. Examples of *estampies* were found in an MS. of the Bibliothèque Nationale in Paris, containing a valuable collection of songs of the trouvères and troubadours, the volume having belonged to Cardinal Mazarin. These examples quoted by M. Aubry show a stanza, then known technically as a *punctum*, thus constructed: First a phrase of four, five, eight, or ten bars, followed by another of four, six, seven, or ten bars known as the *apertum*, and ending on a cadence; then came repetition of the first phrase, followed by one which began with a repeat of the *apertum*, but ended differently on a final cadence, and was called *clausum*. This made a stanza of four phrases, with something corresponding to a half-close in the middle; the phrase-form is fairly free, but the four-bar phrase predominates. The *estampie* consisted of from three to seven stanzas, each beginning with a new melodic outline, but repeating the *apertum* and *clausum* without variation. The melodies show a transition stage of tonality, partly Gregorian, partly popular. They are written in but three values, with ternal beat-figures, and are translated uniformly into $\frac{3}{4}$ time.

This is altogether a very rhythmic formula for the age, showing dance origin, but of an altogether different character from the folk-dance. It was at once more elaborate and stricter in its formation. From this source came the dances whose names were given to

the little contrapuntal pieces in stanza-form which were grouped together into the suite. The dance-feeling was now filtered down not only through social influences, but also through the musical technique of the period, which was of an opposite nature to natural rhythmic usage. Practically nothing of the feeling and but little of the original dance-type remained, this being chiefly represented by the cadence block in the centre. With the exception of the opening prelude the tonalitive scheme was uniform—stanza 1, a start from the tonic key leading to a temporary repose in the dominant key; stanza 2, return from the dominant key, usually by way of the subdominant to the tonic. This scheme shows a definite, if formal appreciation of elementary circling rhythm.

In addition to this, though much depending on it, a certain air of brisk contentment for the most part pervaded the suite. It was not deeply emotional, but in the hands of J. S. Bach, its greatest exponent, it became idealised. In the place of the trite contrapuntal commonplaces of the time, we find in the English suites a marvellous interweaving of idiom and imitation, mostly on the pitch-side, but by no means confined to it. There is far more development of time-outline in these little pieces than any prelude or fugue will bear; here Bach seems to cast off his organ style, and to write whole-heartedly in the exact form of combined idiom and imitation suited to the harpsichord. Into all perfect instrumental art the idiosyncrasies of the instrument enter largely; the composer's technique consists in great part in his

capacity for adapting himself to these varying idiosyncrasies; it happens generally that there is one instrument that appeals naturally to his temperament, and whose technique seems born within him, while that of all the others has to be more or less acquired. The greatest master is he who can acquire the most variations of technique without obstructing the natural flow of his own imagination. In Bach's time there were in Germany but two solo instruments of any importance, the organ and the harpsichord, but these two demanded very different technique. The harpsichord could produce none of the big rolling sequences and massed climaxes of the organ-tone, but it was, though incapable of accent, a much more rhythmic instrument, because each note had a clear attack, resulting from the twang of the string by the quill. The tone-colour was thin and light, and therefore time-figures were effective which on the heavy organ-tone became unsuitable or even vulgar. Imitation was the essential of organ music, but on the harpsichord it was used in its most rhythmic character, bar answered by bar, and blended with time and pitch idioms, which frequently predominated. The clavichord, a delicate chamber instrument, had less general influence upon the suite than the harpsichord, but was beloved by Bach for its graded tone, and used by him for some of his most intimate and expressive utterances.

Taken as a whole, the suite is a cycle of ordered sequence, without any attempt at the larger rhythm of undulation or climax. These two effects were impossible on the harpsichord, and the suite was com-

plete without them. There was nothing in it of the anomaly of the mixed art of language and music. Its movements were perfectly homogeneous in texture, uniform in key and in key-relation, and in stanza-form. Upon this strong basis of unity, contrast was made chiefly by changes of tempo and of time-signature between the various movements, and these changes were summed up in the names given, each of which indicated a type of time. It was a popular cosmopolitan harpsichord cycle, existing in England as *lessons*, in France as *ordre*, in Italy as *sonata de camera*, in Germany as *partita*, for the generic name was of later application. It showed little in the way of development, but the general tendency was to proceed from a great number of different movements, grouped as many as twenty together,[1] to fewer types, which became at once more fixed and more definite. The average suite contained some six or seven movements.

The modern cycle of this name has nothing in common with the historical suite, save in being a succession of short movements. The amount of unity and contrast to be found in it depends upon the composer only, since there is nothing in the nature of a conventional style existing in it. Its association with descriptive titles or with a definite programme now prescribes its emotional character, and renders it somewhat of a mixed art, whereas the fancy titles occasionally applied to the historical suites had little if any effect upon their musical contents.

[1] See Couperin's *Ordres*.

Similar, but of vocal usage is the song-cycle, which is variously written for one voice or several, but usually possesses the character of orderly sequence, assisted by literary unity.

It will be observed that in the suite, the pitch-features made for unity and the time-features, such as they were, for contrast. These are not the lines on which musical form could far develop. When we turn to the greater cycle known as the Sonata, Quartet, Symphony, and Concerto, these characteristics are to a great extent found in reverse order. The pitch-features, starting in formal unity, become gradually freer, while the promiscuous nature of the time-outline is transformed into a complex yet solid basis of unity, consisting principally of idiomatic treatment, almost every note of which bears its exact and necessary relation to the general scheme. The contrast of tempo alone remains, and without this contrast the cycle would cease to exist and become a continuous musical work. The distinction between these two classes of composition is not that one has pauses and the other has none; from this point of view a Wagner opera would appear cyclic, and a concerto or suite, with its movements strung together by a few chords, would be continuous. The pause is a matter of convenience; in spite of it the Wagner opera is continuous, because of its unity of subject matter and lack of formal contrasts of tempo; the acts are not severally distinguished by fast or slow characteristics, but these occur throughout when and where they are wanted. Even without any pause the concerto is cyclic, because of its depend-

ence upon these formal contrasts of tempo, whether or not unity may exist in the relations of the various subjects.

The greater cycle is variously named according to its adaptation to varying combination of instruments. It is called sonata for a solo instrument or for two solo instruments such as piano and violin, trio for three such instruments, quartet for four, and so forth. The term symphony is reserved for the orchestra and concerto for a solo instrument accompanied by the orchestra. All these different names represent a cycle, which may vary in the number of its movements, but usually consists of three or four. It is the first instance of recognition of the influence of instruments upon music by distinction of name, and this is a distinction not found to exist before Haydn's time.

The early sonata or symphony started under a disadvantage. Instead of the perfectly symmetrical and similar little movements of the suite, it dealt with an anomalous collection. It comprised the varied types of the sonata, the variations and the rondo, and added thereto the primitive one of the minuet and trio. The sonata-type took its tonalitive scheme from the suite, and retained for long the stanza character which caused it to be known as binary, that is, in two parts divided by a full close, usually in the dominant key. This made the first movement, and was considered the type of form essential to the sonata. The other movements were admitted by way of contrast. So long as all these as well as the sonata-type retained

their stanza-form, the differing stages of development represented by each one were less apparent. This could only be retained so long as the movements remained short. The growth of musical form may be fairly estimated by its length, as a tree by its height, and the fact that the single first movement of Beethoven's Waldstein sonata covers a larger space in print than an average whole early sonata of Haydn, is one that speaks for itself. The balance of stanza-form is necessarily a small balance; unless repeated at fairly frequent intervals it will not be recognised. A large movement must either add stanza to stanza after the manner of variations, and thus destroy the charm of the small movement, without attaining to a larger balance, or it must drop out the stanza and develop on larger lines. As has been shown, this latter fate befell the sonata-type, the rondo, and finally even the variations in the hands of Beethoven, and thus these three types became merely different manifestations of one spirit; but still the minuet and trio remained hopelessly in the rear, a little primitive thing representing a complete anachronism. Hence it disappears from the advanced greater sonata cycle, and the scherzo is substituted, which, while distinct from the others, is on a par with them in texture and capabilities of development.

The sonata and its kindred cycles now had the material that could work into a balanced whole. There was sufficient variety between the movements, and these were based upon the unity of idiomatic treatment. The only thing lacking was undulating rhythm, which by

its alternating rise and fall should prove a larger principle of unity, and in combination with the idiom provide the means of climax. The study of the works of Beethoven and Schubert shows how they first realised this new balance within the single movement, and then were led to seek for it on the larger scale of the whole. Instinctively they held something in reserve for the end. Compared with the *denouement*, the first movement took on a character of reserve power, energetic it might be, but well restrained; the second became a serene and quiet phase with a slow tempo and predominance of pitch-features; both leading up to a headlong rush which bore all before it. Sometimes this prodigious vitality sufficed in itself, sometimes it led step by step to a greater climax which called in new resources of actual tone. Such works as these are the mountain-peaks of music, and are the highest possible achievement within the scope of the cycle.

It will be noticed that the right balance of the vast resources of undulating rhythm is now the factor that mainly constitutes a perfect whole made up of varied parts. From this point of view definite relation between the initial subjects has a lesser effect. Some contrast of ideas is demanded by the variation between fast and slow movements; this was in the nature of the cycle. Yet there are certain underlying features of unity between the subjects of the various movements of Beethoven's greater works, which show the general direction of his imagination. In the Appassionata it is a time-figure, in the C minor symphony an emphasis on syntonic outline, and sometimes is found the subtlety

of a reiterated interval of modulation which predominates throughout the work, it may be of a semitone or a full-tone or of a larger interval. It is quite certain, that wherever unity is felt to exist, some reiterative feature of a nature perhaps not easily perceived is there to account for it.

The true balance of such a work on orchestral lines is of abnormal difficulty, and demands genius of the highest order. It seems unlikely that the symphonic cycle will ever again reach to such a height, for its consummation corresponded with a particular phase of evolution, when the continuous style was scarcely apprehended. But the normal walks of cyclic usage are still open, wherein orderly sequence shall prevail and satisfy. Where the whole body of tone is small, as in the string quartet, or where one solo instrument predominates as in the concerto, and consequently great climaxes of sound are either impossible or unsuitable, some sort of cyclic arrangement must be employed in a work of any length, because too long a continuous working out of any ideas would lack the needful contrasts of force. We do not want a quartet to be an imitation symphony, a sort of would-be orchestra in miniature, but most of us would rather it remained its normal fascinating self. To do this it must avoid the symphonic texture, and cultivate the tempo contrasts of the cycle in order to obtain sufficient variety on its small platform. In circling rhythm its best effects of tone are limited, but the whole key-circle is available for occasional use. The charms of the quartet lie in dainty perfection of detail, in an unrivalled rhythmic

vigour, and a delicate phrase-articulation without need for stanza. Thus the higher development of the idiom and some measure of imitation also come within its powers, and these ensure its vitality, although the wider emotional rhythm of undulation on a large scale is necessarily closed to it.

# CHAPTER XI

## THE CONTINUOUS STYLE

General lines of evolution—Need for continuity—Advance of undulating rhythm—Assistance of the drama in developing continuous form—Proportions of orchestra and length of work—Orchestral condition of dramatic music—The symphonic poem—The perspective of music—The continuity of counterpoint—Counterpoint in the Church.

The general trend of musical evolution is in the direction of continuity. We have traced the development of the cycle out of the recurring stanza which was once essential to circling rhythm into the continuous movement, where tonality is enforced by the amount of space occupied by the initial key rather than by any systematic chord-recurrence. The tendency is for the smaller bounds to drop out and larger limits to be set. For example, the overture, once a small cycle, became transformed into a single sonata-type. Then in course of time even the larger limits come to appear a convention, which means that the need for them is past, and less obvious and more subtle methods begin to make their appearance. Thus strict form gives way to free. The feeling for the larger outlines of undulating rhythm grows stronger, and all its factors, once used to emphasize the stanza and cycle in a conventional manner, are now put to their natural free rhythmic use in the scheme of the whole. As has been pointed out, free idiomatic utterance needs continuity, advanced

tonality is necessarily continuous, and undulating rhythm in any of its larger phases is impossible without some measure of continuity. The free rhythm of undulation is the latest arrival, and does not begin to exert much effect until pulsative and circling rhythms have got past the small-block stage. It takes time for the subtle influences of rise and fall to make themselves felt above the obvious ones of sudden contrast, but they gain ground inch by inch with the inevitableness of a rising tide. Rise and fall of pitch on a large scale comes to mean more than any particular course of modulation; rise and fall of force does away with the conventional arrangement that a slow movement shall be soft and a fast one loud, fortissimo effects begin to invade the Andante, and the pianissimo is heard in the Allegro; the formal arrangement of contrasts of tempo, the bulwark of the cycle, is the last to go, but this, like the earlier obstructions of undulating rhythm, will surely fade away sooner or later. Critics and theorists may grumble, missing their familiar landmarks, and declare the new style to be invertebrate, chaotic, and irrational, but no man can stay the march of evolution. Music ever advances blindfold.

Thus the continuous style is practically synonymous with the growth of free undulating rhythm, and its wider emotional range. For a long time it is merely a subtle influence pervading the cycle; not until the whole is leavened can we speak accurately of a continuous style.

The operas of Mozart and Weber show sometimes a linking up of scenes in order to obtain climax at the

end of an act, or a prolonged scene which admits of a succession of emotional moods; these are things which, entering into that cyclic waste, the opera, show in which direction the wind is blowing. But we have to wait for Wagner before the real continuous style arrives. And Wagner himself has to write volumes upon volumes of explanation, not always appropriate, in order to justify his proceeding to the world, so strange it seemed. The experiment of the early seventeenth century was repeated in the nineteenth, and this time with success, for music had meanwhile built up its own means of utterance. It does not follow that Wagner had necessarily a greater dramatic insight or even a greater musical facility than Monteverde, but whereas the Italian forerunner had to seek the straw for his bricks ere he could build, Wagner had all his bricks ready to hand. The means were there, and all that was wanted was the master-brain. But without any means, even such a brain can achieve but little.

In music the tracking out of new conceptions is so much a reaching forth into the unknown, a bringing into existence of what has never been before, that it is small wonder that a kindred art should be called in to give some measure of stability to an equilibrium of absolutely unknown proportions, and that cannot in itself at this stage be grasped intellectually. It was just this measure of balance, prescribing emotional mood-succession and position of climax that the drama could supply. Wagner had the dramatic sense both inborn and well-developed; it proved the tree up which his less developed musical sense climbed like a tropical creeper,

and thus supported grew to a lavish luxuriance that wellnigh killed the tree. From the musical point of view, the Rubicon was crossed; here was the new style, and the manner of its birth and growth mattered little. But it was natural that Wagner should deceive himself into supposing that the play was the thing and music its accessary, and that other people should go on repeating the same after him. Now, however, that the world perceives that instrumental music did not, as was expected, die with Beethoven, but has taken on a new lease of life, it is worth while to inquire into the meaning and scope of this vitality, and its relation to Wagner's music.

The first fact that meets us is the development of the orchestra; further, the skill displayed by composers generally in the management of its technique, and the increasing popularity of orchestral music. If we admit that the future of music lies in a continuous treatment, the orchestra is indispensable. One essential of continuity is a body of instruments capable collectively of continuous tone-utterance, offering sufficient colour and force-variations to dispel any possibility of monotony.

In music a relation should exist between the length of the work and the variety of instrumental tone employed. A Wagner opera lasting for four hours demands a larger orchestra than a Beethoven symphony of forty or fifty minutes. The reason why the Wagner orchestra is not four times the size of Beethoven's is because a great part of the needful contrast of the opera is provided on the stage. The orchestra is here largely

a factor of unity, and a study of Wagner's method of orchestration shows that he sought instinctively for the effects of subtly blended colours, more than for those of contrast between one instrument and another. Therefore the instrumental parts have less individuality, especially those of the string orchestra, and are made to merge into a continuous flow reflecting the prevailing mood of the operatic situation. The texture of the music becomes at times more imitative and promiscuous than idiomatic, in this way reverting somewhat to the earlier contrapuntal conditions. These are the musical conditions of the theatre rather than of the concert-room. But when we turn to present concert-room music, few composers seem able to discern any difference between the technique of their own art and that of the theatre. On the whole the operatic conditions threaten to dominate everything, as counterpoint did at a former time. And lacking the human element of the drama, the sensuous element of the orchestra (enlarged since Wagner's time) rides roughshod. In this department of music as in others, on the one hand, too much diversity, or, on the other, too homogeneous an orchestral style, means lack of unity and of contrast, and hence of the higher emotional phases. The best effect to be obtained lies in a certain economy of means based upon unity, and the cultivation of the individuality of instruments. The orchestra required for, say, a continuous composition of an hour's length will probably be found to be larger than Beethoven's in mass as well as in variety of tone, but mere colour does not require to take the front seat. Where it

does so, there is a fault either in the texture of the music or in its relation to the size of the orchestra.

Orchestral concert-room music is just now in a transitional stage. It wants to be continuous like the drama, but has not yet arrived at distinguishing its own continuous style. The fact that this new condition has come into music through the drama, is quite sufficient to account for the predominance of the dramatic and poetic element in concert-room programmes. The symphonic poem is a sort of half-way house; it is freer than the opera, but it still clings to poetry much as an inexperienced swimmer will cling to a rope. It is further hampered by its weight of orchestral apparel, and its imitation of operatic orchestral methods. It has grasped something of the general principles of free rhythm, but it lacks sufficiently strong idiomatic development, the free generation of ideas. Where a great number of orchestral parts are proceeding at once, the sum of these, considered as time-outline, is either monotonously equal or uncertainly promiscuous. It is less homogeneous than the time-outline of organ counterpoint, because orchestral instruments cannot be coerced into proceeding uniformly in a contrapuntal manner. It is merely silly to give the trombone a time-outline similar to the flute, and in counterpoint the time-outlines of the various parts should be all on an equal footing. Counterpoint is in this sense flat, like the pattern of an ironwork gate, and we accept its lack of perspective as we do the gate, as a matter of course. But in the orchestra the case is different. Here there must needs be diversity of time-

outline, and this should mean perspective. Without attempting to find exact analogies between two widely differing arts, in a general way it may be said that pitch, intensity, and quality in music correspond to colour and tone in painting, and that time-idiom is the drawing of music. In true polyphonic art the idiom produces a picture in so far as perspective is concerned, in which foreground, background, and middle tones can distinctly be observed. This means that all the time-outlines which are proceeding simultaneously distinct from one another, are not of equal importance to the ear. One of slower duration may stand out, or a striking form of time-figure will attract attention above the others, and all the rest will group themselves round it, and assist to give it point and emphasis. This main idiom is always in the foreground; in an orchestral work there will frequently be found subsidiary themes appearing and disappearing in the middle distances, while small and insignificant figures of accompaniment fill up the background. All this is primarily and fundamentally due to time-outline. To the beauty of the effect pŏlyphony, colour, and force are essential, but these three factors, which might at first sight appear all-important, are thus less of value in themselves than in so far as they serve to indicate the true balance and proportions of the idiom. If there are no striking figures, no themes of stirring interest, but only a promiscuous time-outline, the finest proportions of pitch, colour, and force will be pointless, because nothing exists of any interest to be proportioned, these proportions having become an end in themselves instead of a means

to an end. Much modern programme music is open to this criticism. It cannot be pretended that a poetic idea, scene, or action, however interesting, is able under any circumstances to perform the function of idiomatic treatment in music. It can interpret that development for its own purposes, but it cannot replace it if it is missing. All such work, however cleverly scored, is doomed to oblivion, because it lacks the musical elements of permanent interest and profound emotional appeal. It substitutes for the true musical utterance a promiscuous speech, which is emotionally more or less of a blank, lacking rhythm. Continuity of texture a continuous composition must have, but it should be a coherent continuity, either of pitch or of time. The symphonic poem has too often neither one nor the other.

A continuity of pitch only, results in a coherent composition if worked out upon the old contrapuntal lines, and does admit of some effect of climax. Its scope is limited, but it is within these limits a fully developed style. Counterpoint had continuity from the beginning, owing to its indefinite tonality, and thus altogether missed out the early stanza stage. It was an advanced style while the orchestra was in its youth. One might say indeed that counterpoint has never been young. With its early stages the rhythmic vigour of childhood and youth had nothing to do. When it expresses anything, it is the utterance of grave and reverend age. Thus with the waxing of rhythmitonal means of continuity has occurred simultaneously the waning of the contrapuntal; continuity, formerly the one solid ad-

vantage possessed by counterpoint over natural music, is now common to both. At the present time the rhythmic continuous style and frequently the actual details of orchestral music are transferred bodily to the organ, the contrapuntal instrument, which becomes converted into an imitation orchestra to the loss of its own individuality. This is a fact to be deplored, but it is also significant as a sign of the times. To confine a large body of musicians, whose horizon is more or less limited by the organ, to the archaic musical speech of counterpoint is a thing beyond the wit of man to compass. Rhythmitonal art these modern musicians will have, and since most of them have not an orchestra available, they transfer it to the organ. What suffers the most in this transaction is the Church. Counterpoint was an ecclesiastical creation in past ages, and undoubtedly is the musical style best suited to the church-services. It is also best fitted to the musical material therein employed, which consists of choral and organ tone. Under the shelter of the Church one might have hoped to find the sober dignity of the contrapuntal style cherished and upheld. Yet in Anglican churches, with the exception of certain cathedral services where the old traditions linger, for contrapuntal music one may go far to seek. The modern vocal substitute misses the dignity of continuous art without acquiring the rhythmic vigour of natural cyclic music, and justly lays itself open to the criticism which perceives in sentimentality a debased form of art. The best hope for the restoration to the organ and the Church of their true continuous style

lies in the multiplication of orchestras. If people have plenty of the real thing they reject an imitation, and when the craving for rhythmitonal art is satisfied outside the churches, musical taste may come to demand something very different inside from that which now appears to satisfy.

# CHAPTER XII

## SUMMARY AND CONCLUSION

Our task draws to its close. We have examined minutely the tone-material of music, and have shown the rhythmic principles that fashion it. We have traced the various types of music to their origins in the working of these principles, and assigned them their place in the evolutionary order. We have seen that the bulk of the actual tone-material (apart from instruments) comes into being at a very early stage, and the development of music consists thenceforward of the use made of the material as units of recurrence. It has become evident that the whole secret of musical form lies in the recurrence of units, units that are of a fixed or strict nature (the beat, the bar, the triad, the key) requiring exact repetition, and those that are of an optional or free nature, the ideas that determine the character of the utterance. We have analysed the development of these ideas in idiomatic outlines, and shown how the idea dominates by means of its reiteration the whole texture of music, and assisted by circling and undulating rhythms is able to awaken and control vast tracts of the emotional nature. It has been proved that in time-outline is found its earliest and its most essential utterance. We have noted the underlying unity of East and West, and compared

and contrasted the diverse development of each. We have seen that Eastern music is still conditioned by frequent lack of notation or the use of imperfect forms of it, and that instruments generally are in a backward state: consequently, that excepting in the far East where the bell-type of instrument is much developed, of purely instrumental music but little exists. In melody we have realised that the East has struck out a path of its own from which the West is cut off by its harmonic tonality. Further, we have unravelled the complication caused by the early introduction into Western ecclesiastical music of Eastern tonality, and traced the slow progress of this art till by gradual assimilation of rhythmic features it became a definite though conventional system of the West. We have noted the unique position occupied by the composers of the mature contrapuntal system, and that perfect works of art can exist that by their very limitations produce their effect, and are consequently the last words in their own particular range, which admits of no further development. Finally, we have indicated the natural evolution of rhythmitonal music from primitive dance-song to the more formal melody of the folk, and thence by growth of phrase and stanza to the types of the cycle, and their gradual transformation by means of free rhythm into a partial and at length a complete phase of continuity. In this is summed up the evolution from strict form to free. Whither the principle of continuity will lead us remains the problem of the future.

Much more might have been written on all of these points and on many others, but sufficient has been said

to fulfil the task of the analyst. As already observed, the object is not personally to conduct the tourist through musical regions, but to provide an intellectual outfit that the musician may use as seems to him fit.

This could only be done effectually by working from first principles, and it is upon the agreement of musicians generally as to these first principles that the practical value of this theory will depend. If the principles are conceded when their logical outcome is realised, much will be gained; for the critic, a sound intellectual basis for his criticism in place of the chaos that has reigned since the standard of the sonata cycle fell to pieces; for the composer, a knowledge of his tools and the readiest way to use them; for the teacher, a clear road instead of a labyrinth; for the student, the right use of the precious years of childhood and early youth instead of a dead loss never to be made good in later life. And for the vast audience of music, those who hear with the spirit, if not with the understanding also, there will be the possibility in the next generation of becoming readers as well as hearers.

It is not too much to say that the whole future of music will depend upon the number of people who are able to read and write it, at least in its simpler utterances. Then there will be a demand for simple music which the people can read. Music is now in the position of literature before the education of letters became general, when a book was as completely a sealed thing to the people as a score is nowadays. Every one knows the enormous difficulty of learning to read in later life, but it is learned in childhood with comparative ease, and

experience shows that with even greater ease can musical reading be taught to the young when this teaching is conducted upon rational lines. In this way we open to them a storehouse of healthy enjoyment, a recreation from which they are at present effectually barred. The prodigious technique of music will then be easily mastered, and will fall into its right place as a means and not as an end. The true inwardness of musical form will then be perceived. For the power of music is universal. Setting aside the cases of tone-deafness and actual deafness, of which but a small percentage exists, there is some music that is attractive to everybody. Superficially music may be a toy, a plaything, a game of skill, an academic exercise, a mathematical puzzle, but its real attraction goes deeper. It is a mirror of ourselves. It tells us not what a man thinks about things, not how he appears to the multitude; it is not even the selection of himself that he offers to his friends, but the utterance of that essential personality of which we, and probably he also, are more or less unaware. There is no more irresistible attraction than a new personality, and it is this that draws us when we listen to music. Here is the human imagination in action, untrammelled by the necessity of reproducing any forms of the outside world, any known experiences that can go into words, carving out channels for itself in rhythmic tone with an elemental freedom and abandon of convention that seem to suggest perennial youth, the escape of the spirit of man from its prison-house of conventional thought. Many of us have felt this influence without understanding it; music is the

strongest mental force that a man can bring to bear upon his fellows, because the most direct. There is nothing between him and them, no convention to be observed, no intellectual formula to be mastered; it is a simple speaking from heart to heart. The value of music to the race, intellectually considered, is that it forms this unique human document.

How long we shall be content to leave the record unread intellectually depends upon ourselves. To point out the method of its interpretation this book has been written, but the application of the method to all the music of the world opens a vista which from the present standpoint may well appear illimitable. We are as yet spelling out the beginning only of what Music has to teach us.

# APPENDIX

## THE EVOLUTION OF EUROPEAN TONALITY

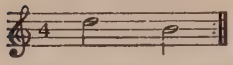
The design of the first six sections is to illustrate the evolution of melodic pitch-outline from consonant to dissonant conditions, the transition from chord-form to scale-form, and the subsequent amalgamation of these separate vocal types. The earliest stages of the evolution of European tonality have to be sought outside of Europe. When sufficient material has been collected, something like a plan of the geographical distribution of consonant conditions may be mapped out. At present it may be said that these occur in America, in parts of Africa, and that a mixed type, chiefly consonant, appears to prevail in the South Pacific Islands, becoming more microtonal as it reaches Australia and New Zealand. The similarity existing between the various examples in each section respectively is too obvious to need pointing out in detail. With "Harmonic Consonance" we enter upon primitive harmonic conditions, leading to actual harmony on the pedal bass, which gradually develops the harmonic bass. The importance of the round in this connection should be pointed out. The same evolution is traced in instrumental harmonic examples, where considerable differentiation in time-outline begins to appear, as the character of the instrument makes itself felt. Morley's "Consort Lesson" completes the illustration, showing that at the close of the sixteenth century some idea of score had arrived, and that instruments were not then written for uniformly on the lines of vocal usage as is generally supposed.

Throughout these illustrations the crotchet beat is used, change of value from minim or quaver having been made in the few cases where it was required.

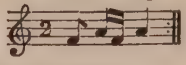
The name of the collector or transcriber has been inserted in all cases where it could be ascertained.

## Section A.—Melodic Consonance. Degrees of Scale, 5, 3, 1.

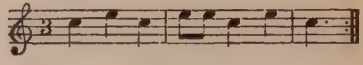
Nubia. Naumann.



Niger. Canoe Song.

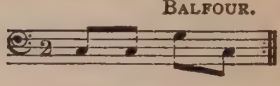


Cradle Song. Mockler-Ferryman.*

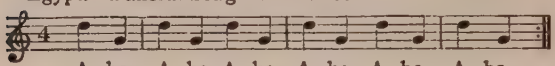


Delagoa Bay. Kaffir Musical Bow. Burchell.

Hottentot Gomgom. Balfour.

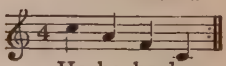


Egypt. Funeral Song with Dance. Villoteau.



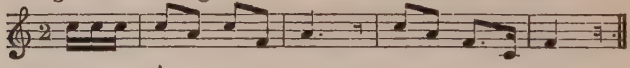
A-ba A-ba A-ba A-ba A-ba A-ba.

Hottentot. Balfour.



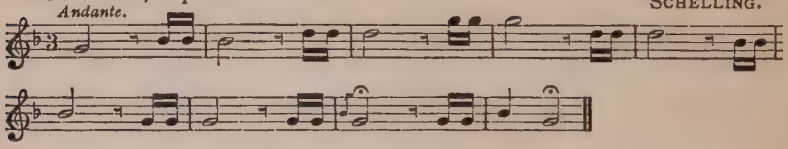
Ho ho ho ho.

Niger. Love Song. Mockler-Ferryman.

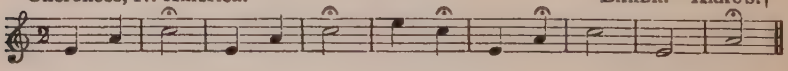


New Guinea, Papuans. Schelling.

*Andante.*

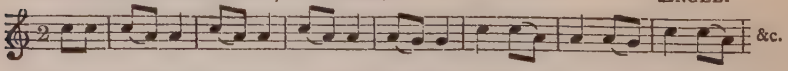


Cherokees, N. America. Baker.—Kraus.†



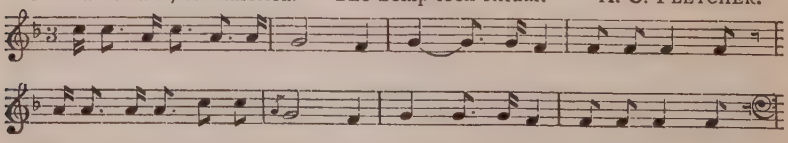
## Section B.—A Transitional Stage. Degrees of Scale, 5, 3, 2, 1.

Macusi Indians of Guiana, S. America. Engel.



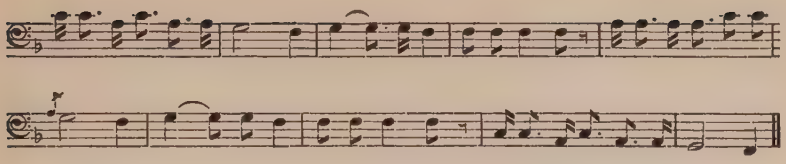
&c.

Omaha Indians, N. America. "The Scalp-lock Ritual." A. C. Fletcher.

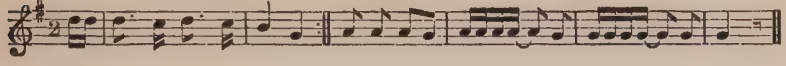


* From "Up the Niger," by permission of Lieut-Col. Mockler-Ferryman.

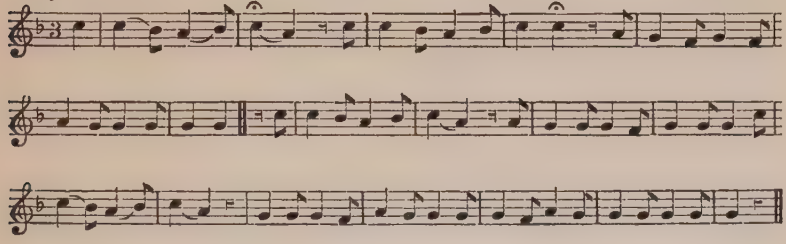
† From "Appunti sulla Musica dei Popoli Nordici," by permission of Baron Kraus Figlio.



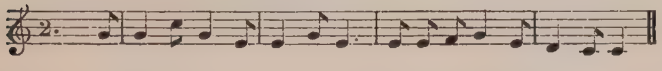
Fiji Islands, S. Pacific.* WILKES.



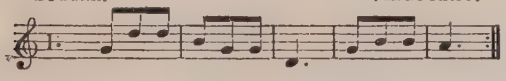
Fiji Islands.* WILKES.



Bahama Negroes, West Indies.* EDWARDS.



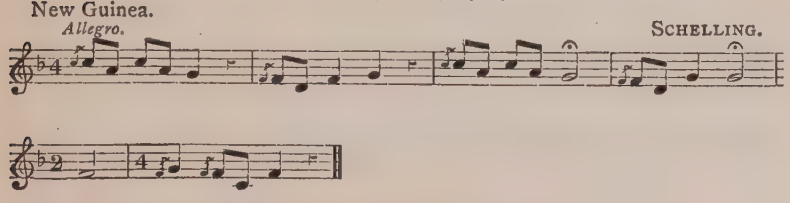
Soudan. VILLOTEAU.



## SECTION C.—THE PENTATONIC FORMULA. DEGREES OF SCALE, 6, 5, 3, 2, 1.

New Guinea.

*Allegro.* SCHELLING.



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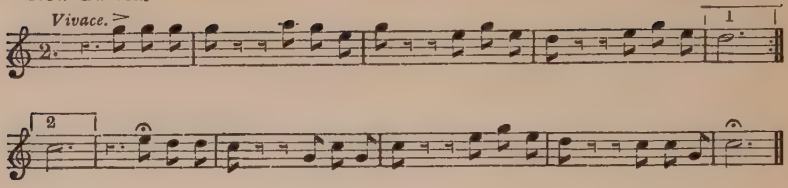
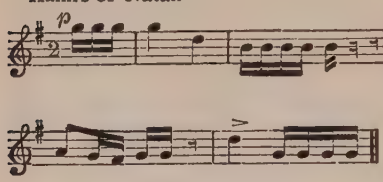
* With 4th as a passing-note.

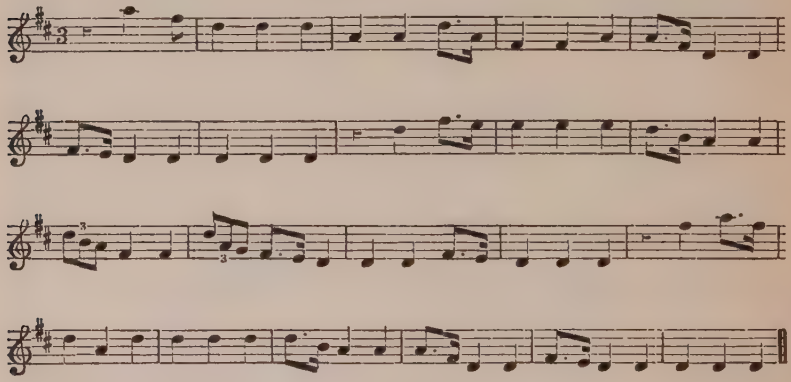
New Guinea. SCHELLING.



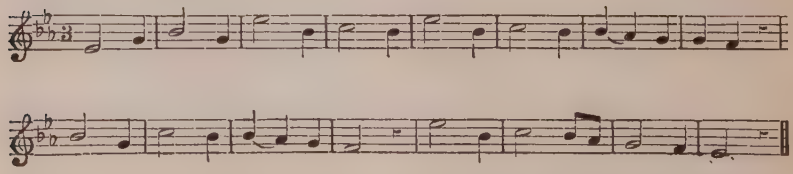

Kaffirs of Natal.* SHOOTER.




Sioux, N. America. Dance of Dogs.† BAKER.—KRAUS.



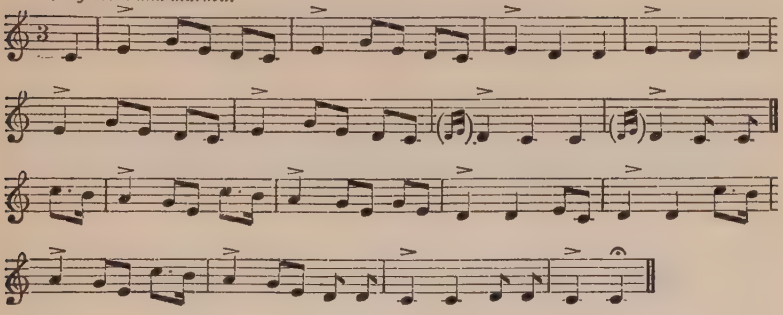
Germany. Watchman's Song.† HOWITT.



* With passing 7th. † With passing 4th.

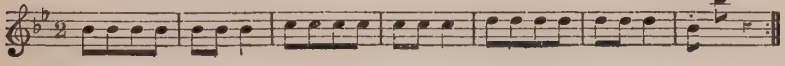
Ireland. "The Eagle's Whistle." L. BROADWOOD.*

*Very brisk and marked.*

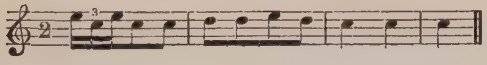


## SECTION D.—ELEMENTARY SCALE-FORM. DEGREES OF SCALE, 1, 2, 3 (5).

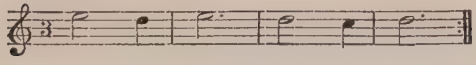
Tutuila, Samoan Islands. WILKES.



Niger. Hunting Song. MOCKLER-FERRYMAN.

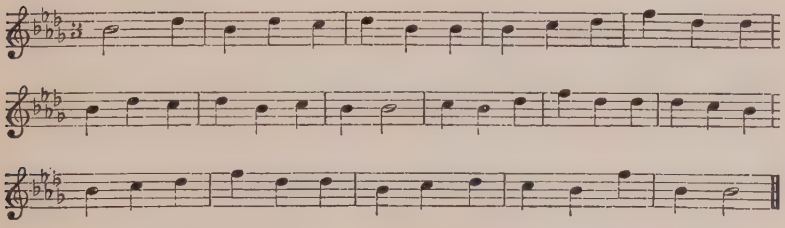


Angola, W. Africa. SOYAUX.



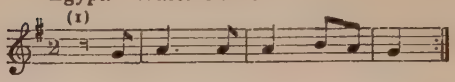
Amhara. NAUMANN. Tigre. NAUMANN.

Siberia. KRAUS.

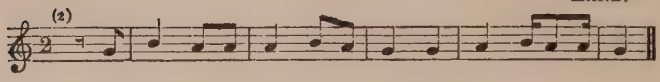


* With passing 7th. Noted at Camphire, co. Waterford. "Folk-song Journal," No. 10. By permission of Miss LUCY BROADWOOD.

Egypt. Water Carriers. LANE.

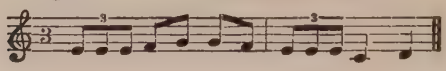


LANE.

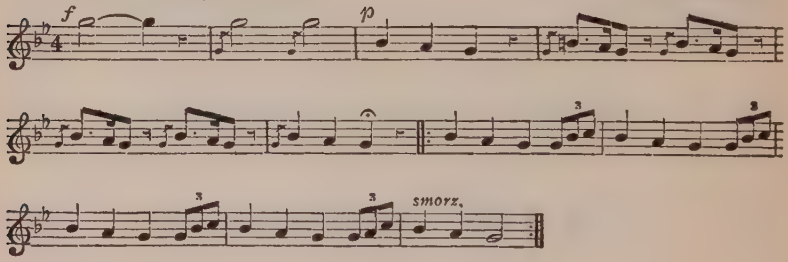


## SECTION E.—SCALE-FORM. DEGREES OF SCALE, 1—4, 1—5, 1—6.

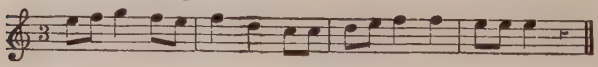
Niger. MOCKLER-FERRYMAN.



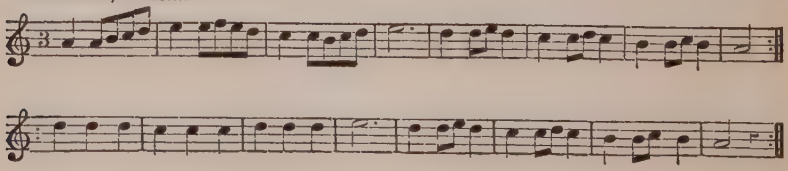
Caribbean Natives, West Indies. WALLASCHEK.




Nile. Boat Song. VILLOTEAU.

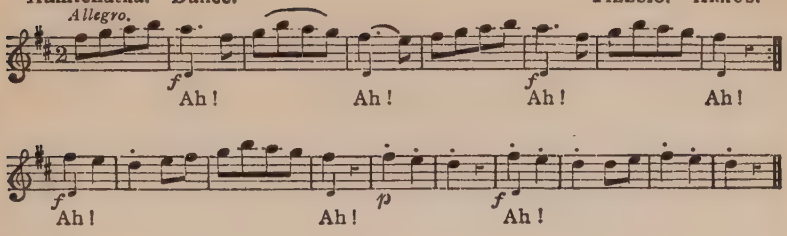


Esthonia, Russia.*



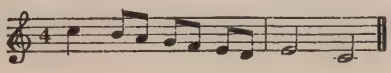
* Selections from the Most Celebrated Foreign Journals, 1798.

Kamtchatka. Dance. TILESIO.—KRAUS.



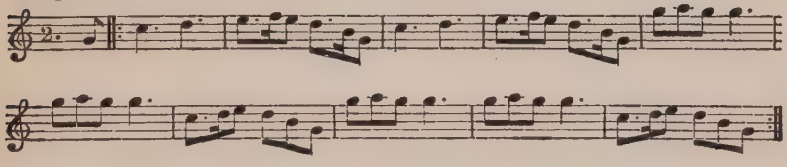

## SECTION F—COMBINED CHORD-FORM AND SCALE-FORM.

West Africa. SOYAUX.

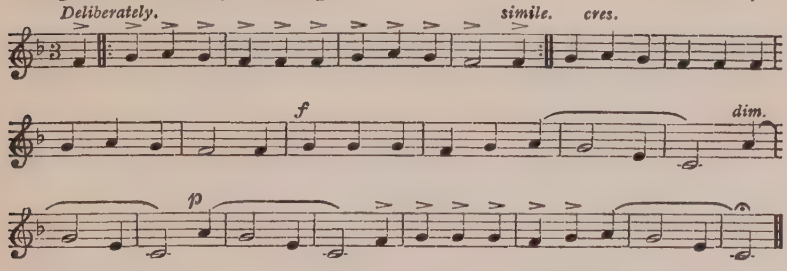


Kaffirs of Natal. SHOOTER.

Niger.*



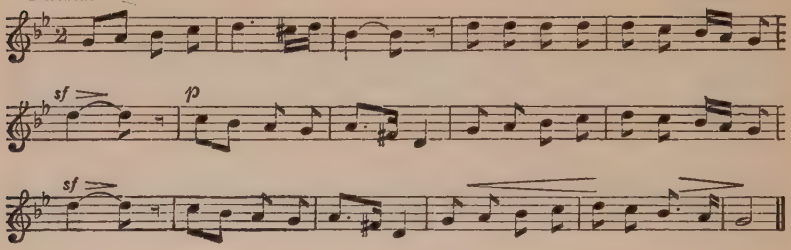
England. The Story of Orange. F. KIDSON.†




* "Narrative of Expedition to the Niger, 1848."

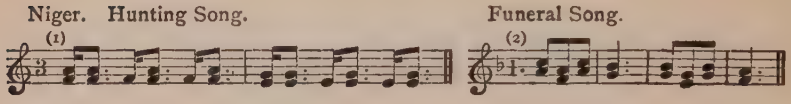
† "Folk-song Journal," II., p. 295. By permission of Mr. FRANK KIDSON.

Russia. ENGEL.

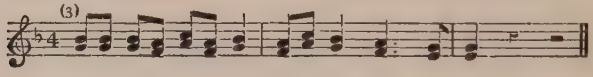



## SECTION G.—HARMONIC CONSONANCE.

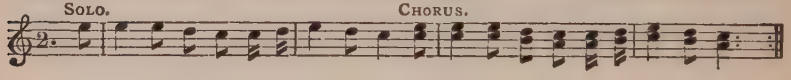
Niger. Hunting Song. Funeral Song.



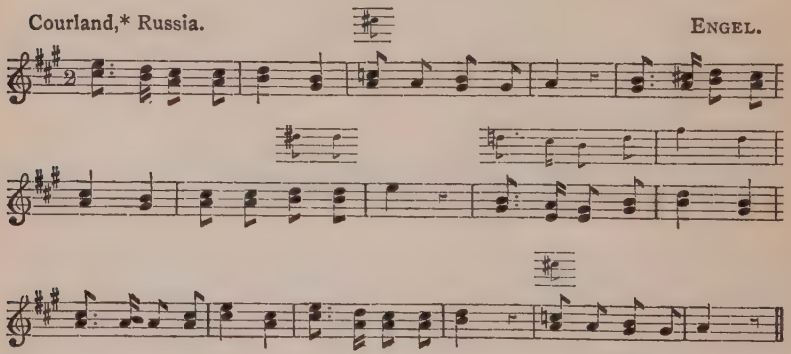

Spirit Song. MOCKLER-FERRYMAN.




Egypt. Fellaheen. (Sung whilst excavating.) LEPSIUS—ENGEL.




Courland,* Russia. ENGEL.



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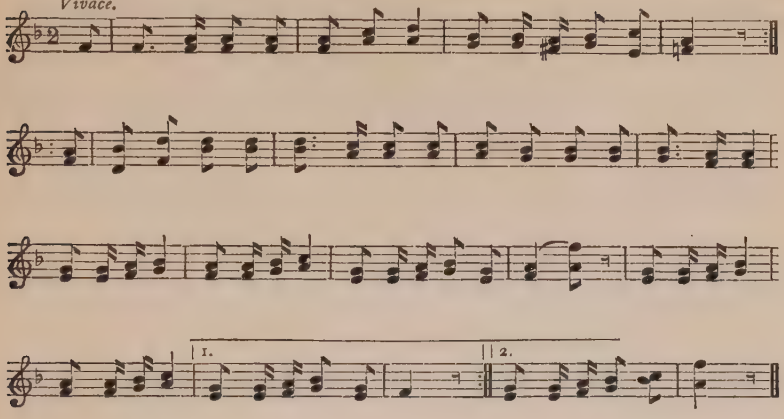
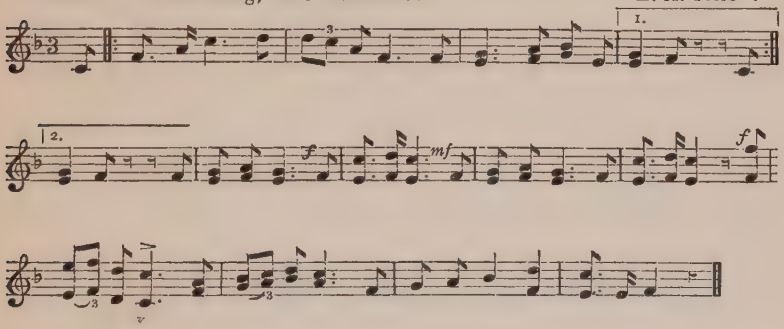
* The alternative version is the original air which was introduced into Courland, and was heard being sung by the peasants shortly afterwards as altered above, *and with the addition of the second part.* See ENGEL'S "Introduction to the Study of National Music."

Norway. Sailors' Song, "Opsang." L. A. SMITH.*

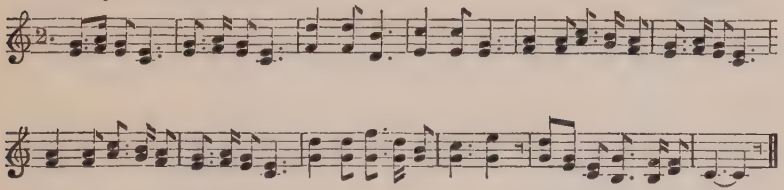
*Vivace.*




Holland. Sailors' Song, "De Kabels Los." L. A. SMITH.



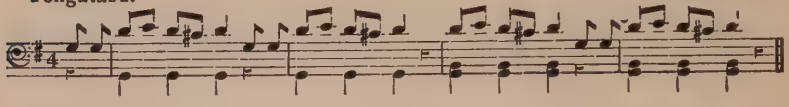

Germany. Christmas Carol. WICHERN.



* "Opsang," "De Kabels Los," and "Haul on the bowlin," from "The Music of the Waters," by LAURA A. SMITH, are transcribed by permission of Messrs. KEGAN PAUL, TRENCH, TRÜBNER & Co.

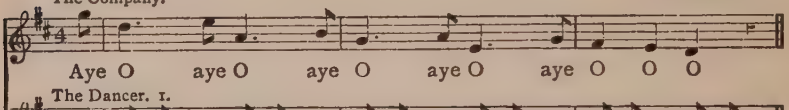
## Section H.—Vocal Harmony on Pedal Bass.

Tongatabu. Wilkes.

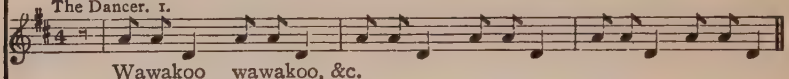


Bushmen, S. Africa. Burchell.

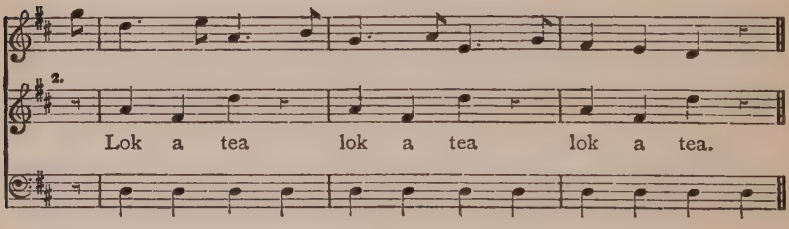
The Company.



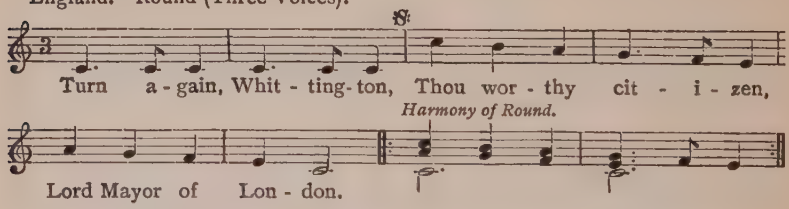

The Dancer. 1.




Water-drum.

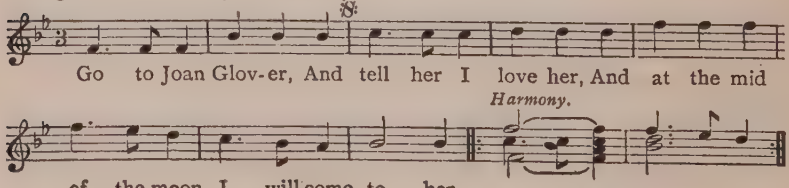



England. Round (Three Voices).

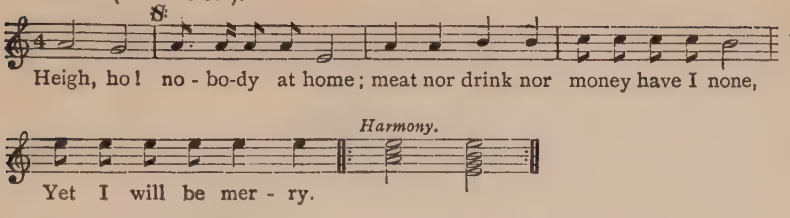



## Section I.—Vocal Harmony on Two Bass-Notes.

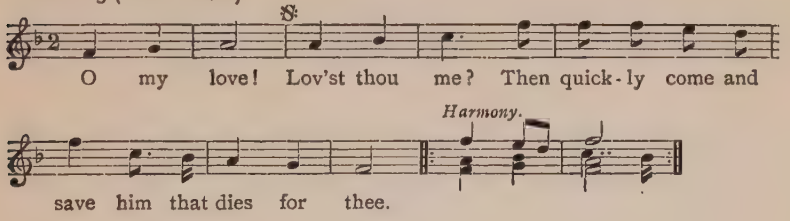
England. Round 1 (Four Voices).



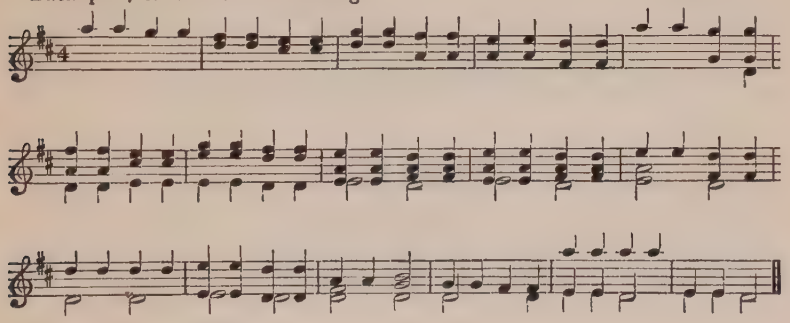
Round 2 (Five Voices).



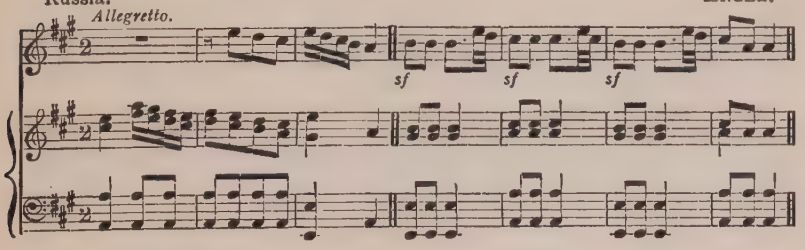

Round 3 (Four Voices).




Bachapins, S. Africa. Dance-song.* BURCHELL.



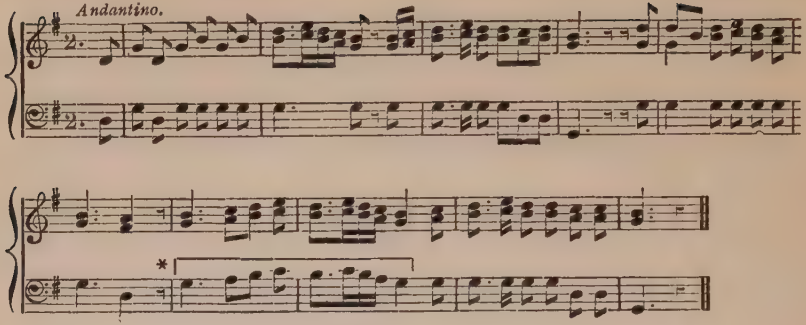
Russia. ENGEL.




* Sung for an hour without pause, occupying twenty-nine seconds in repetition.

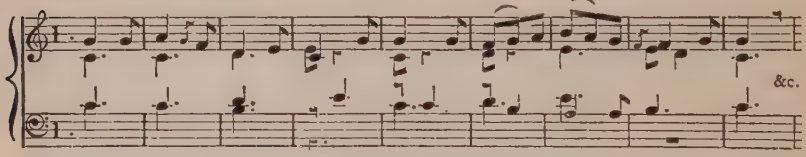
Germany. "Drei Sterne." ENGEL.

*Andantino.*

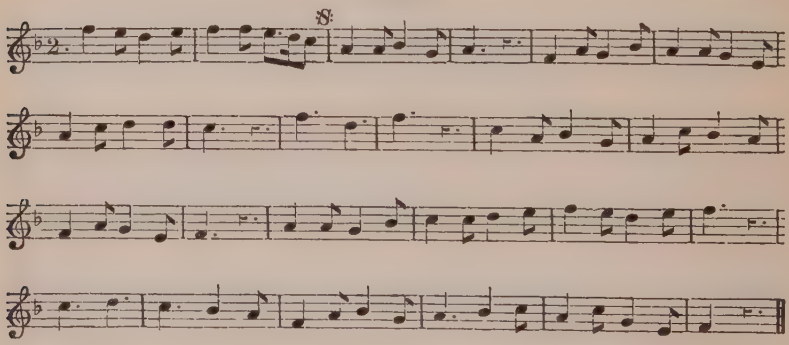


## SECTION J.—VOCAL HARMONY ON THREE, FOUR, OR MORE BASS-NOTES.

Spain. "Je n'aimerai."†




England. Round.‡ "Sumer is icumen in." "Burden." Four Voices with Two-part



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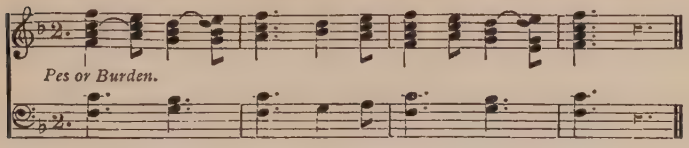
* This passage is a doubling of the second part in the octave, and not a Harmonic Bass.

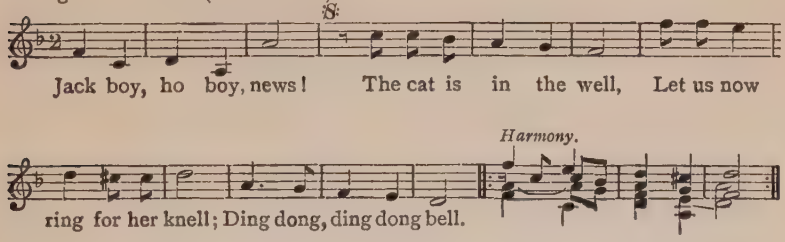
† In MS. de Montpelier (12th or 13th century), deciphered by Coussemaker.

‡ From Harl. MS. 978, in British Museum; written by John Fornsete, a monk of Reading, 1228.

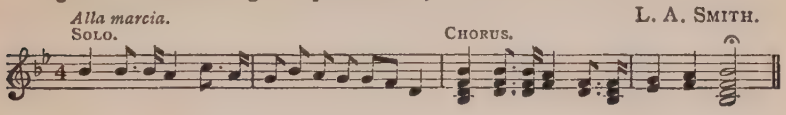
Harmony of Round with addition of "Burden." Bass on three notes.



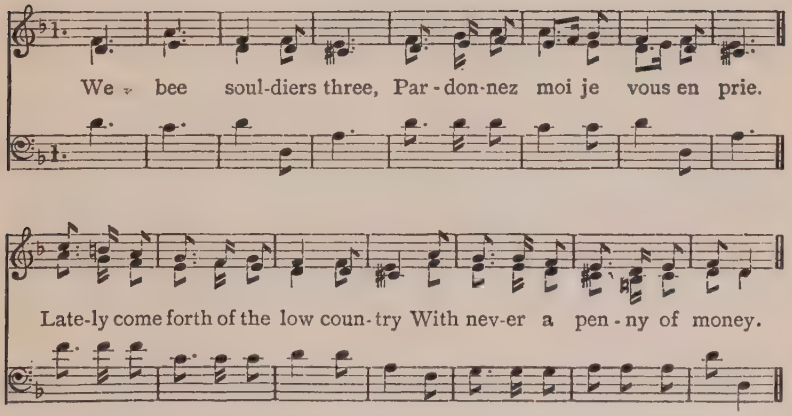

England. Round (Four Voices).




England. Sailors' Song. Capstan Shanty, "Haul on the bowlin'."



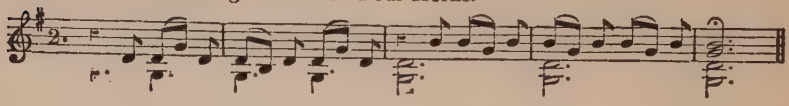

England.* Three-men's Song (in print, 1609).



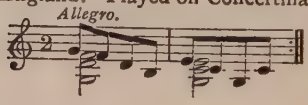

* "Three-men's Songs" are mentioned in the time of the Norman Conquest, in connection with Hereward the Wake.

## Section K.—Instrumental Harmony on Pedal Bass.

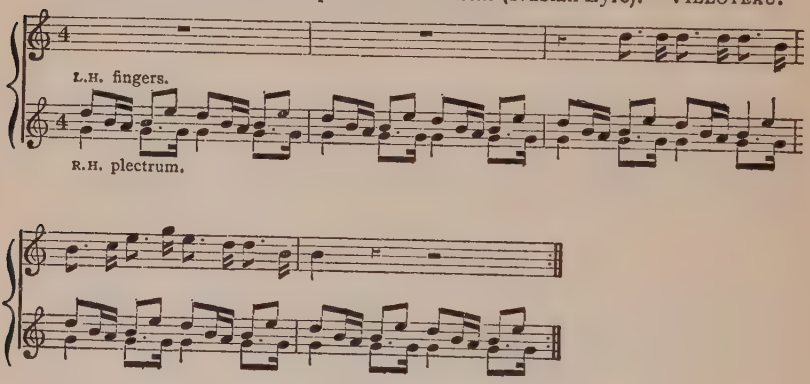
France. Old Hunting Fanfare on Four Horns.



England. Played on Concertina.



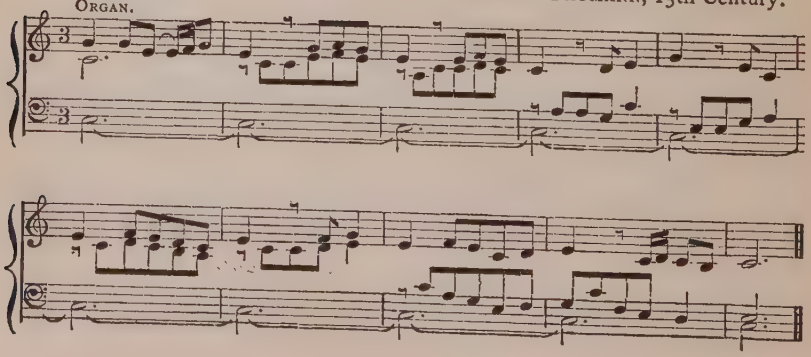

Dongola. Song with Accompaniment of Kissar (Nubian Lyre). Villoteau.




Germany.

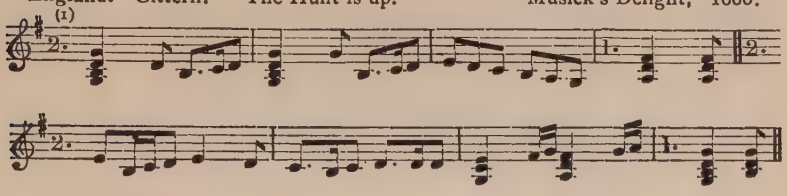
Organ.

Conrad Paumann, 15th Century.

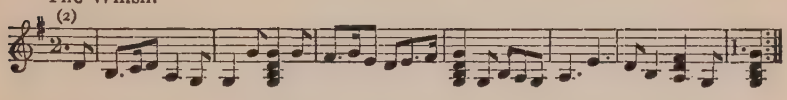


## Section L.—Instrumental Harmony on Two Bass-Notes.

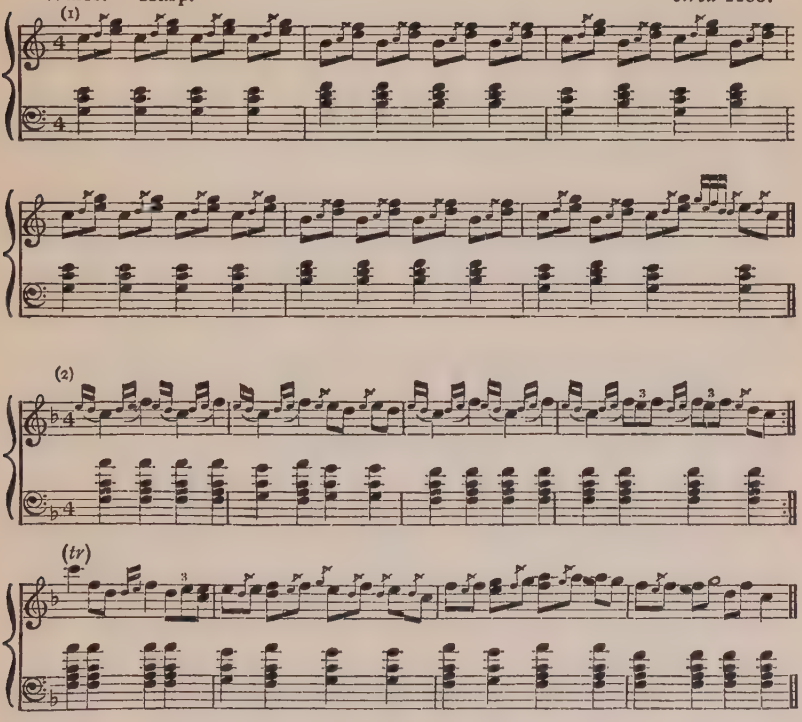
England. Cittern. "The Hunt is up." "Musick's Delight," 1666.



"The Whish."



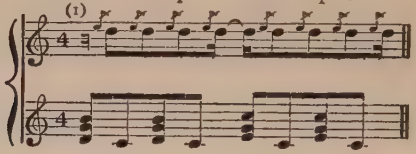
Wales.* Harp. *circa* 1100.



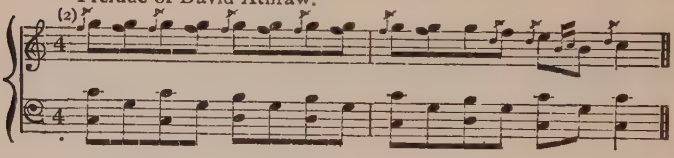
* Transcribed by the Author from the original letter notation printed in "Myvyrian Archæology of Wales," taken from Add. MS. 14905, in the British Museum.

## Section M.—Instrumental Harmony on Three, Four, or more Bass-Notes.

Wales.* Harp. "White Piper."

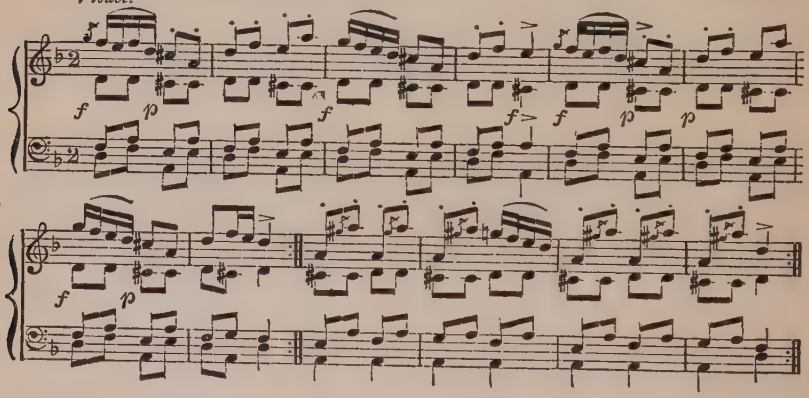


"Prelude of David Athraw."

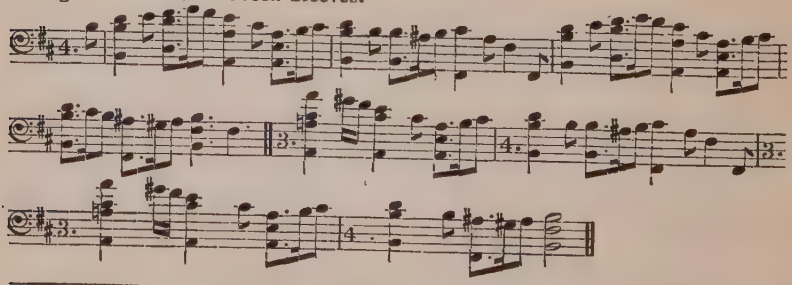


Russia. Cossack Dance (for Four Pipes). Kraus.

*Vivace.*

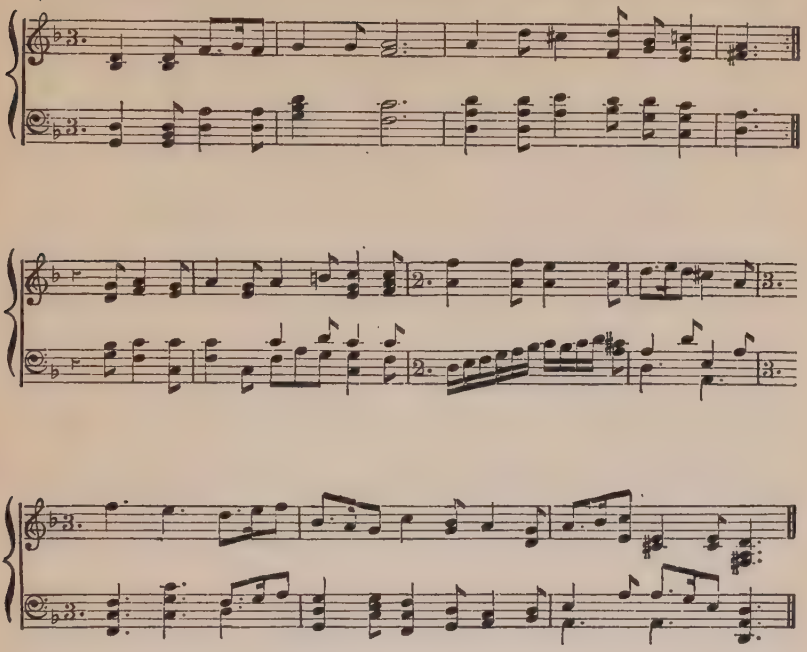


England. Lute. "Green Sleeves."

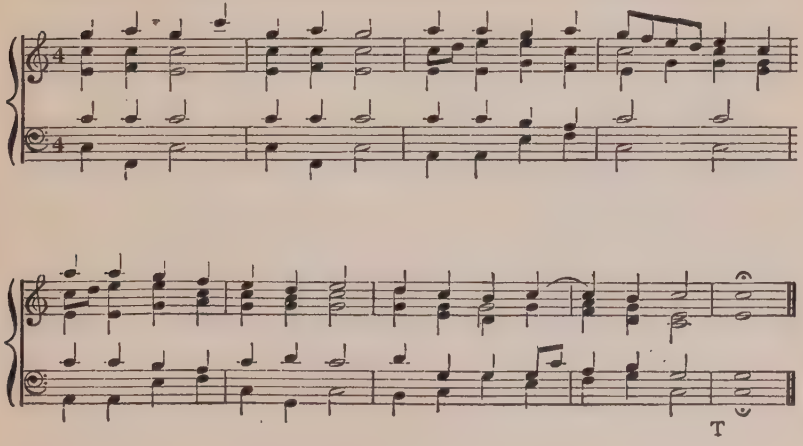


* From Add. MS. 14905, in British Museum.

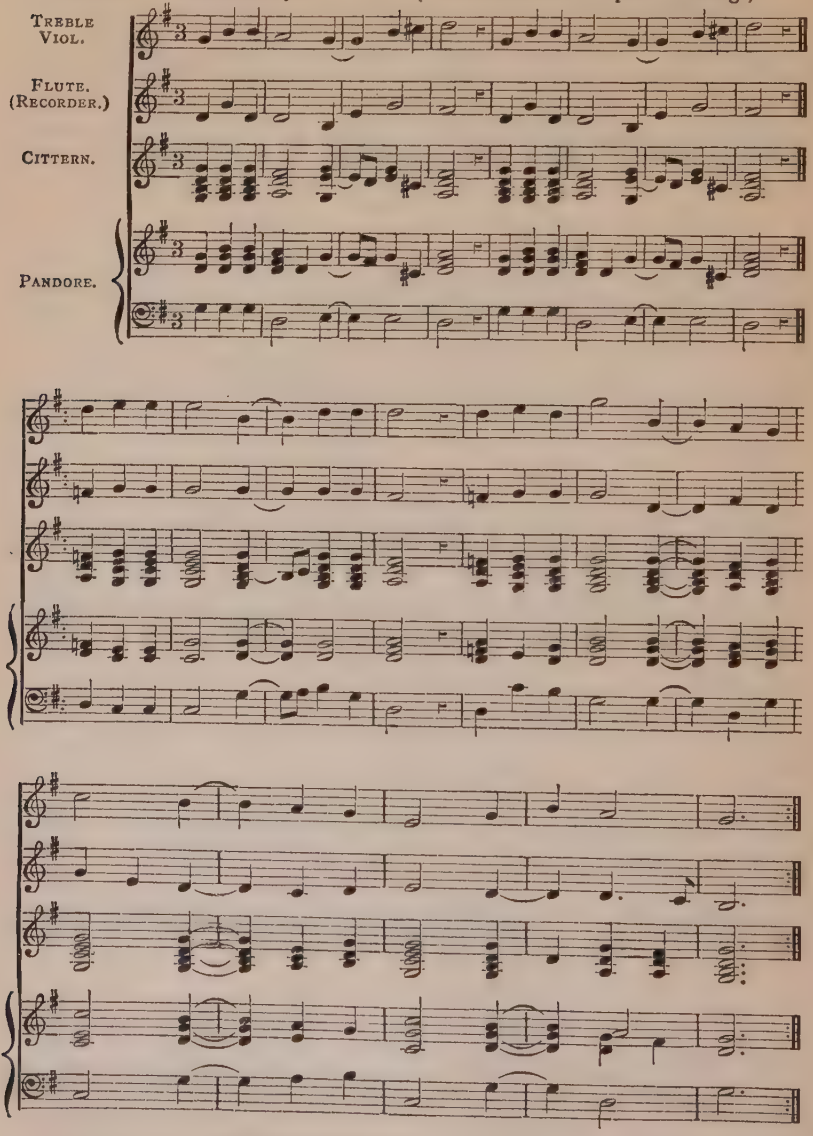
"The Irishe Ho-Hoane." FITZWILLIAM "Virginal Book," 17th Century.



France. Air from "Le Balet comique de la Royne" (for Five Viols.), 1581.



England. "O Mistris Myne." From MORLEY'S "Consort Lessons," 1599.* (Lute and Bass Viol parts missing.)



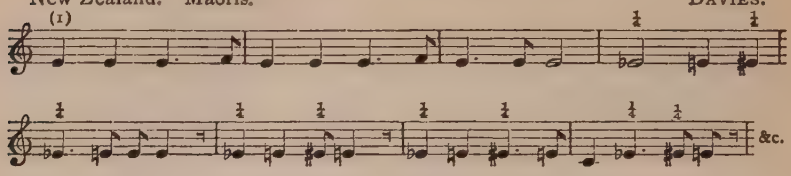

* Transcribed from the original parts in tablature by the Rev. F. W. GALPIN. The beat-value is changed from 𝅗𝅥 to ♩

## THE EVOLUTION OF ASIATIC TONALITY

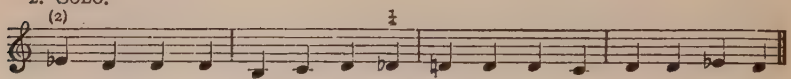
The following sections are designed to show something of Asiatic tonality from its rise in microtonal conditions to its development in the Hindu raga. In sections O. and P. it is essential to distinguish between the tonic and the scale-tone; the pitch of the tonic is stated and the scale-tone used is C. This is the tone adopted invariably by the Raja Sir S. M. Tagore in translating Hindu music into European notation. It does not mean that the actual pitch of C is necessarily used, but it represents a system of relative pitch notation for the use of singers. The original Hindu notation is the counterpart of our Tonic Sol-fa, but the Raja adapted it to the European letters of the scale of C. The advantages of using this scale only in stave notation are evident. Since there is no key in Eastern music, the use of key-signatures to represent absolute pitch may be misleading, and elaborate modal inflections are far more easily studied and compared when reckoned from the one scale-tone. In sections N. and Q., the examples are in their original notation. The specimen of Javanese discant was written down by native musicians who had learned European notation, but must be regarded as somewhat of an approximation rather than an exact reading. The tuning differs considerably from the European scale, but the time-outline is probably correct, the preponderance of equal outline being due to the type of instrument employed. With the exception of the rebab and the tjelempoeng (a kind of harp), all the instruments are of the bell or gong species. The nature of the type of form cannot be understood from this small extract, but it possesses features of interest. Each piece opens with an introduction of seven to twenty-six beats unbarred, in unison and somewhat after the manner of a Gregorian chant. Then follow several phrases in the tala-bar, of eight-bar length, all more or less alike and followed by a coda which is sometimes in longer notes. The nature of the melody is that of one formed upon the tala-unit, being mostly in equal outline with occasional changes of value. Pitch-figures are found extending to a bar in length, four or five of which may be repeated in an irregular order embedded in promiscuous pitch-outline. Only fifteen differing talas are in use, each of which is recognised by name. It should be borne in mind that this music is an extemporisation, and is naturally of an elastic nature; at the same time the basis of strict form usually to be found in the East is here unmistakable.

## Section N.—Primitive Microtonal Types.

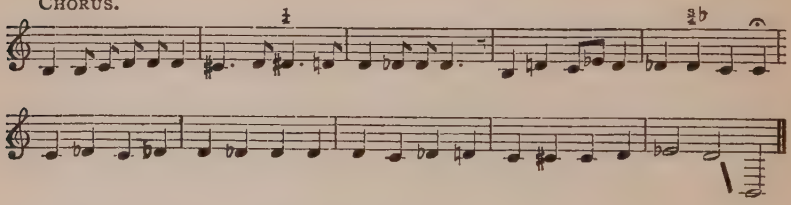
New Zealand. Maoris. (1) Davies.




2. Solo. (2)

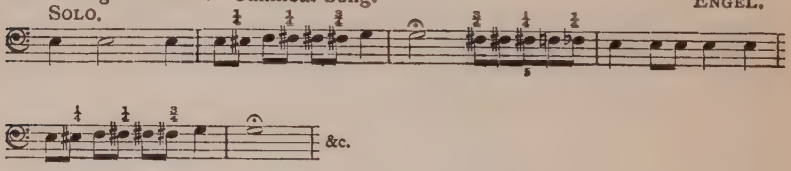


Chorus.



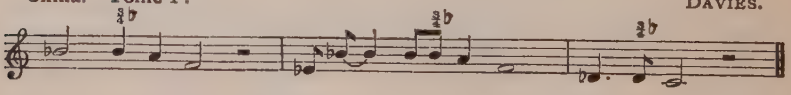
Washington Island. Cannibal Song. Engel.

Solo.

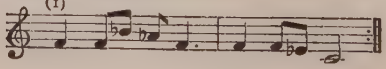



## Section O.—Tetrachordal and Modal Types.

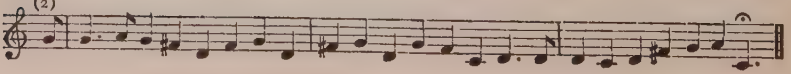
China. Tonic F. Davies.



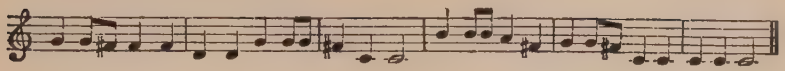
Java. Tonic F. (1)



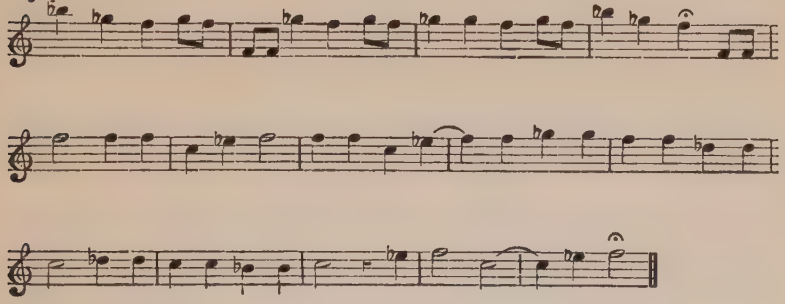
Tonic G. (2)



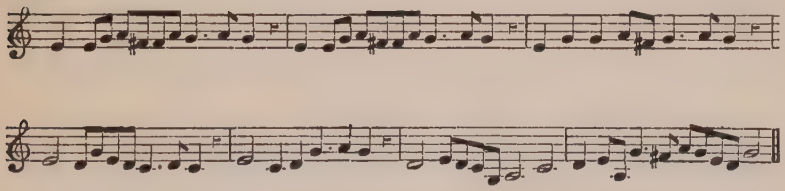
New South Wales. Tonic G. WILKES.



Japan. Tonic F.

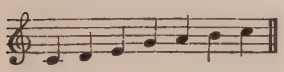


China. Tonic G. VAN AALST.

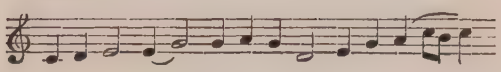


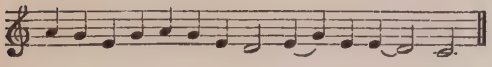
## SECTION P.—HINDU RAGAS AND MELODIES.*

Sexatonic Mode.



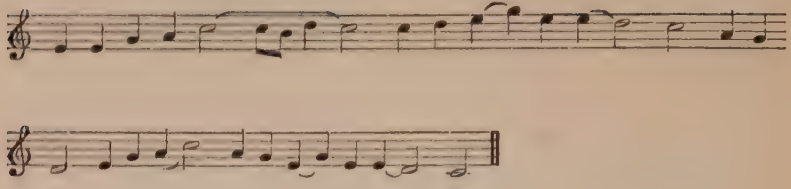
Ragini Bhúpáli. Tonic E. First Strain.



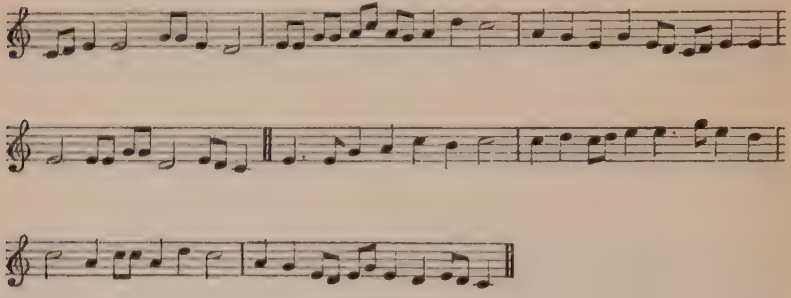


* From "The Musical Scales of the Hindus," S. M. TAGORE.

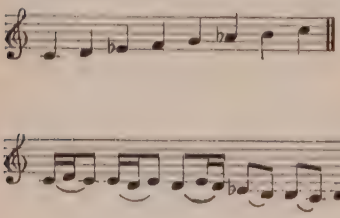
Second Strain.



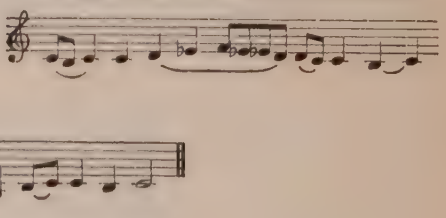
Melody. Ragini Bhúpáli. Tala Madhyamána.



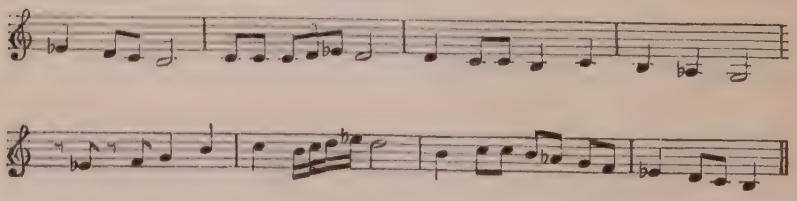
Complete Mode.



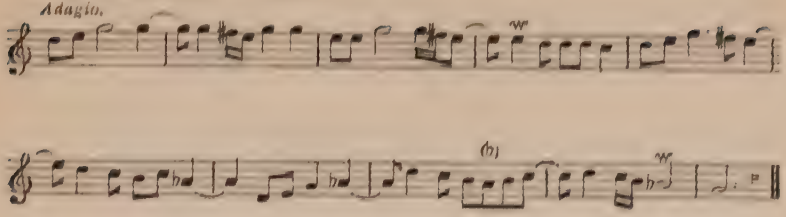
Ragini Pilu. Tonic B. First Strain.



Melody. Ragini Pilu, Tala Thoongree.

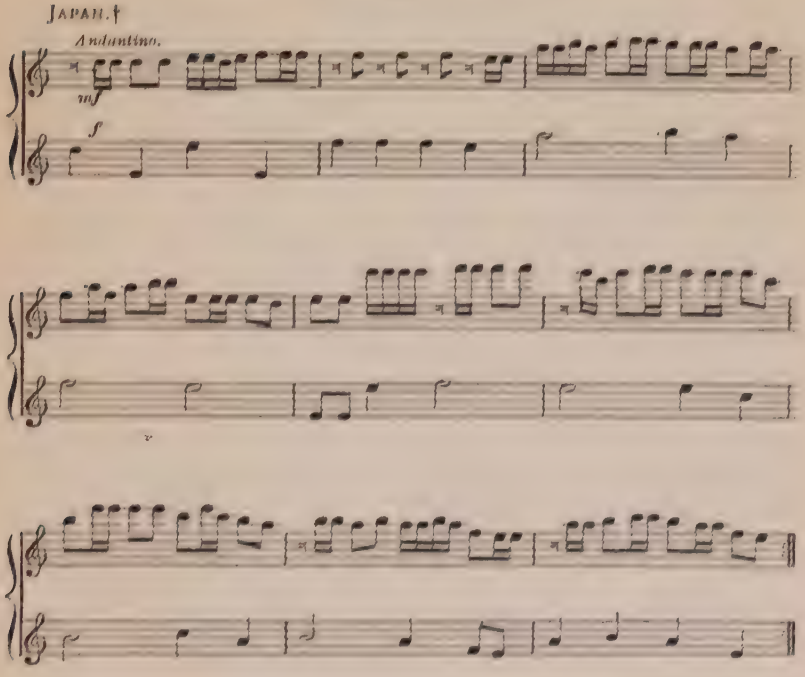


Song of Salutation.* Tonic G.




## Section Q.—Discant.

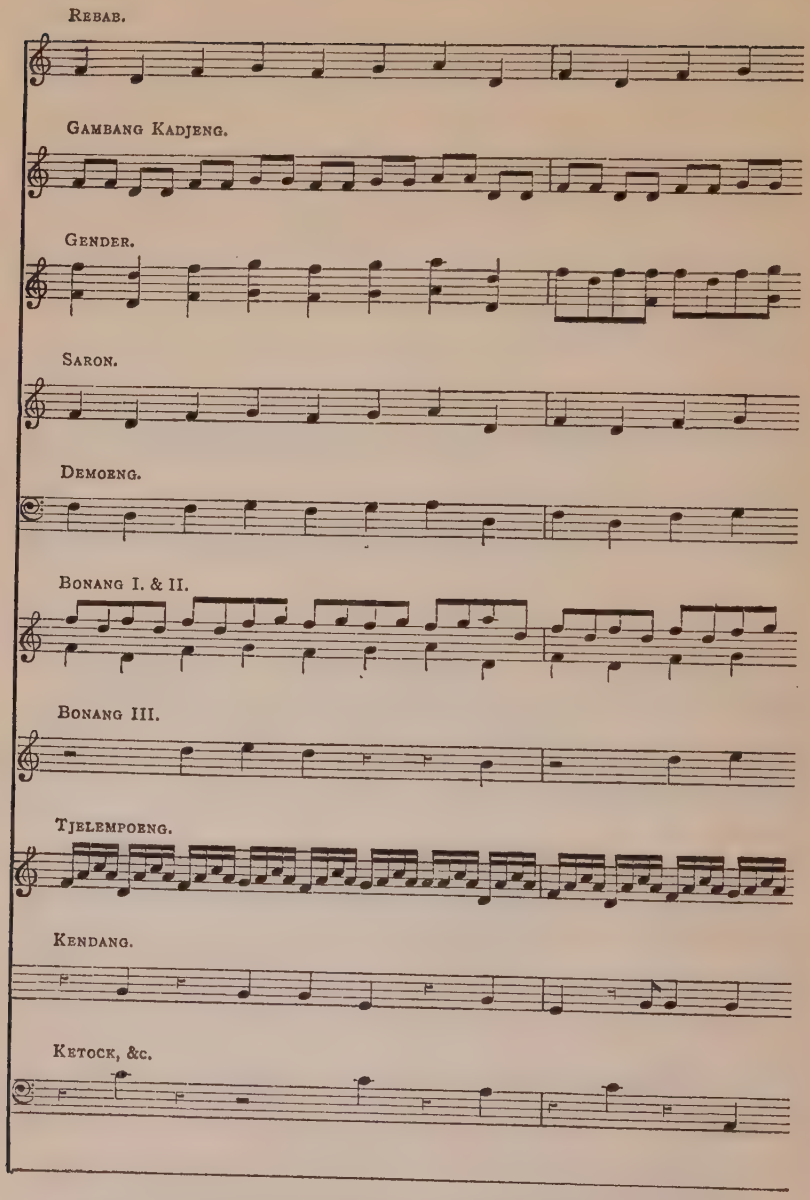
Japan.†




* From C. R. Day's "Music and Musical Instruments of Southern India and the Deccan." By permission of Messrs. Novello & Co., Ltd.

† From "A Collection of Japanese New Popular Music, a Japanese Fashionable, Comical, Dancing, Theatrecal, Shamisen and Koto Musics," 1892.

JAVA.*




* From "De Gamelan te Jogjakarta," Drs. GRONEMAN and LAND, 1890.

## ANALYSIS OF TIME-OUTLINE IN ENGLISH FOLK-SONG

For purposes of analysis it has been thought well to separate the outlines of time and pitch, in order to facilitate a new study. The time-features of the previous examples were left unclassified, because these were chosen as illustrations of pitch, and in the following tunes the conditions are reversed.

The bulk of our English tunes would appear to fall into the class based upon equal outline and that of the strict figure. The manner in which a folk-singer will introduce variety while maintaining an equal outline is as interesting as it is instructive. By changes of time, by a shortening of the cadence bar, by free phrase-form, by a frequent use of five-beat time, the monotony of the equal outline is broken. Where it is strictly maintained pitch characteristics have naturally the main interest, but by far the larger number of songs show equal outline with figure variation. These time-figures are indicated above each tune, and also the phrase-form, in order to assist analysis. The question of how far syllabic outline may have conditioned the time-outline of each individual song is one which cannot be entered into here in detail. This is the class of song in which the influence of language is at its strongest, and verbal suggestion is likely to appear in the figure-variations, though by no means does it invariably control them. The cadential pause-note which frequently terminates a phrase is a prolongation only, and does not constitute variation of the outline.

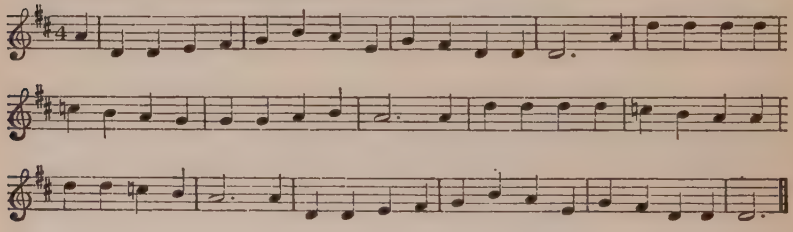
The classes of the strict and free figure contain the finest tunes of English folk-song. The leading figure is given first, and the others form variations upon it, and priority is here of great importance. It does occasionally happen, however, that the leading figure is not to be found in the first bar, as in "The Seeds of Love," and in all probability this is due to verbal influence. The free figure at the close of "The Trees they do grow high" is a frequent characteristic in this position, or at the end of a phrase. The basis of the free figure is perhaps less congenial to the English folk-singer than is that of the strict, but in three-beat time a fairly strict idiom with a pause on the second beat of each bar presents a characteristic type, familiar to us in "Barbara Allen," and here

illustrated by the fine tune of "Bruton Town." "Lord Bateman" is a somewhat similar example. It is considered by the author to be in six-beat time which brings the characteristic pause on to the third beat instead of the second, and adds dignity to the tune without altering the free nature of the figure.

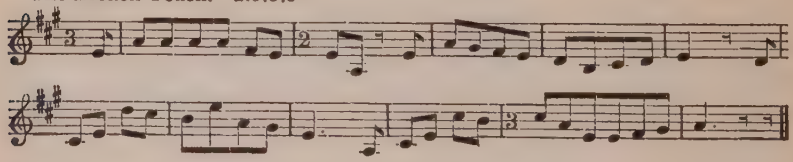
Throughout all these examples there exists an immense variety of detail in the treatment of figure, which cannot possibly be eclipsed, if equalled, by the folk-song of any other country. Also noteworthy are the freedom of phrase and the ease with which change of time is made. It is thought that this may be considered on the whole a typical collection, although it represents but a few out of the many tunes published by Mr. Cecil Sharp, by whose permission these are here reproduced.

## Section R.—The Basis of Equal Outline. 1. Unvaried.

The Banks of the Sweet Dundee. 4.4.4.4.*

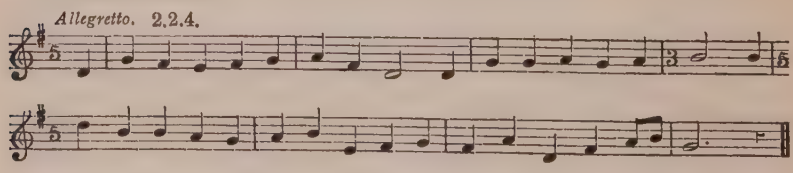


The Broken Token. 2.3.3.3



The Bold Fisherman.

*Allegretto.* 2.2.4.

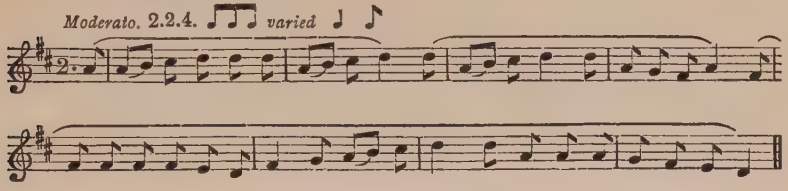


* These numbers indicate the number of bars in each phrase successively.

## 2. Varied with Figures, Strict and Free.

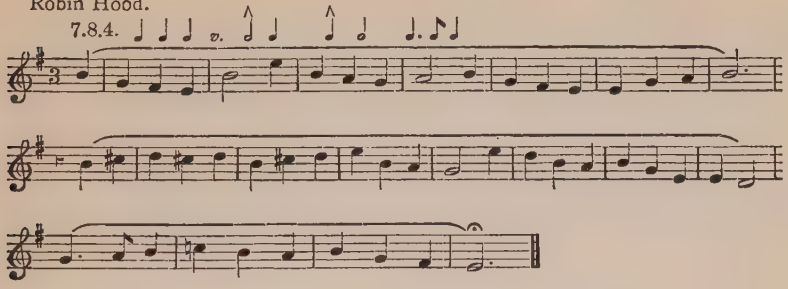
The Lover's Tasks.

*Moderato.* 2.2.4. *varied*



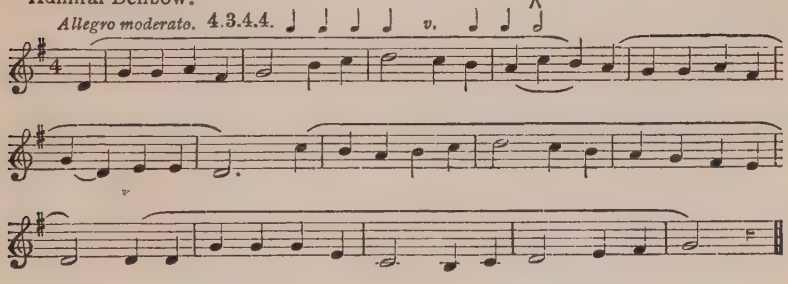
Robin Hood.

7.8.4. *v.*



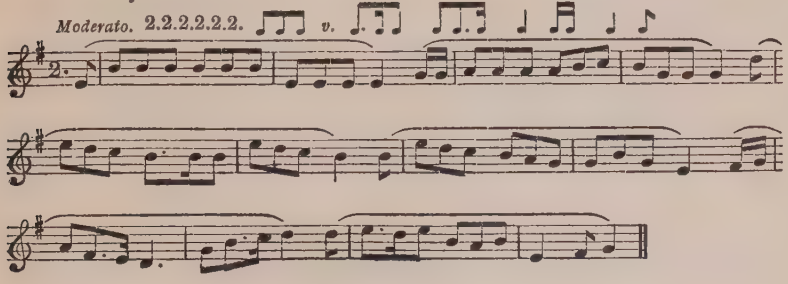
Admiral Benbow.

*Allegro moderato.* 4.3.4.4. *v.*



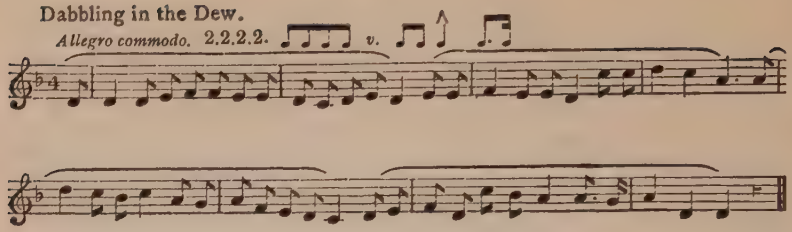
The Hearty Good Fellow.

*Moderato.* 2.2.2.2.2.2. *v.*



Dabbling in the Dew.

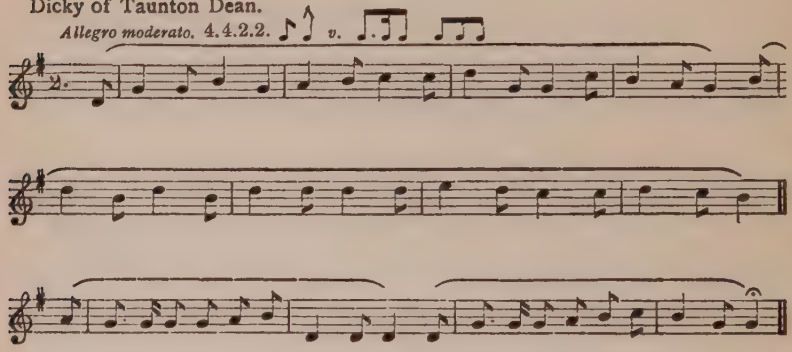
*Allegro commodo.* 2.2.2.2.



## Section 8.—The Basis of the Strict Figure varied by other Figures, Strict, Free, or Equal.

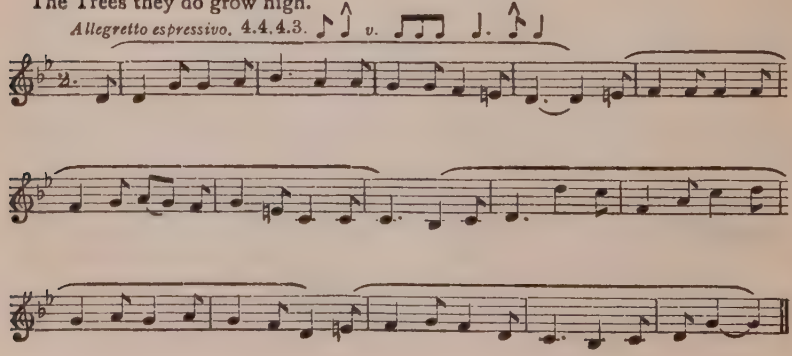
Dicky of Taunton Dean.

*Allegro moderato.* 4.4.2.2.



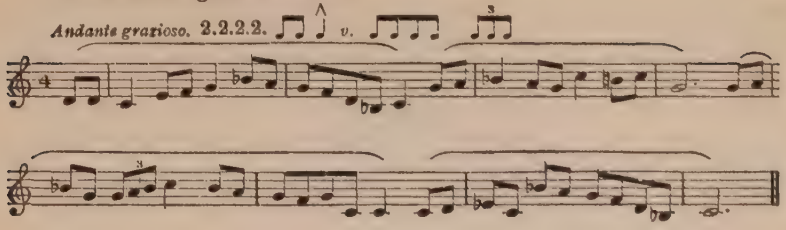
The Trees they do grow high.

*Allegretto espressivo.* 4.4.4.3.



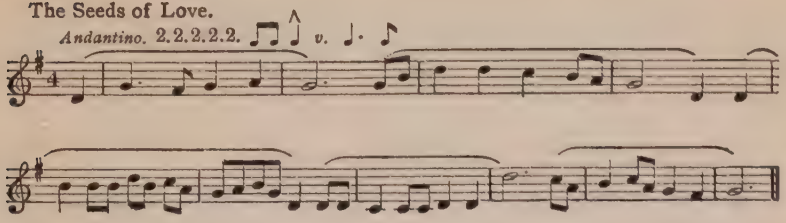
As I walked through the Meadows.

*Andante grarioso.* 2.2.2.2.



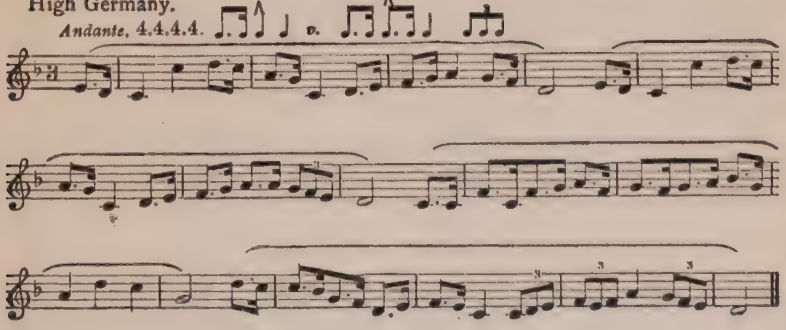
The Seeds of Love.

*Andantino.* 2.2.2.2.2.



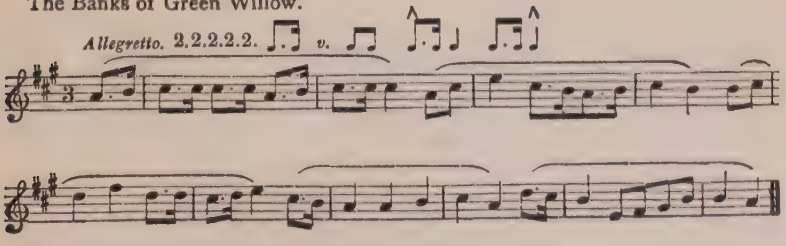
High Germany.

*Andante.* 4.4.4.4.



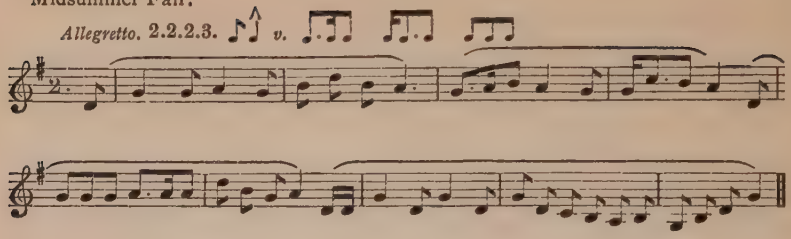
The Banks of Green Willow.

*Allegretto.* 2.2.2.2.2.



Midsummer Fair.

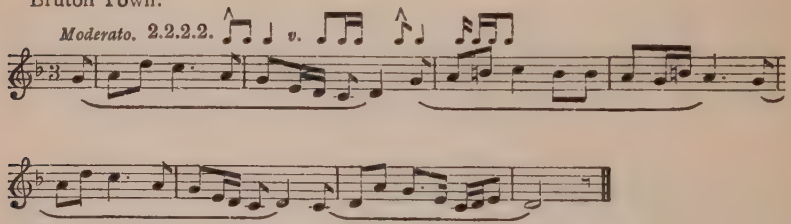
*Allegretto.* 2.2.2.3.



## Section T.—The Basis of the Free Figure varied by other Figures, Strict, Free, or Equal.

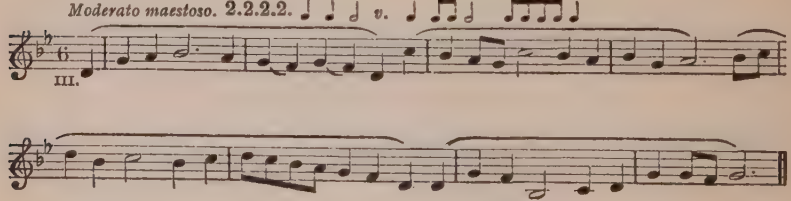
Bruton Town.

*Moderato.* 2.2.2.2.



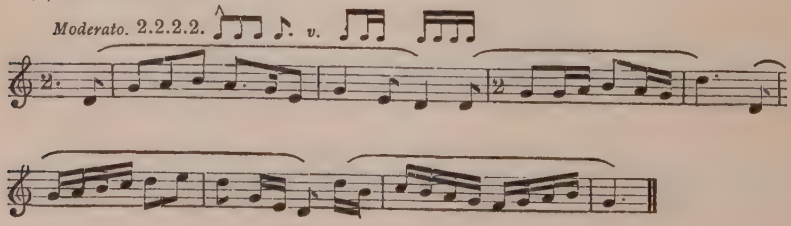
Lord Bateman.

*Moderato maestoso.* 2.2.2.2.

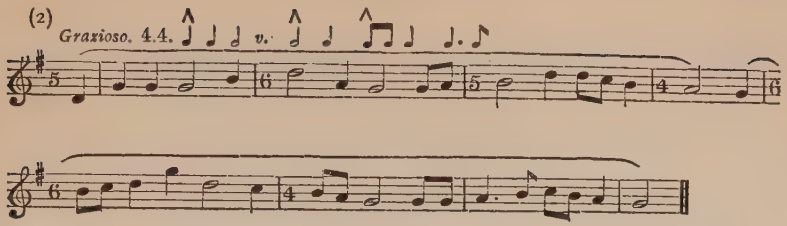


(1) Cold blows the Wind.

*Moderato.* 2.2.2.2.

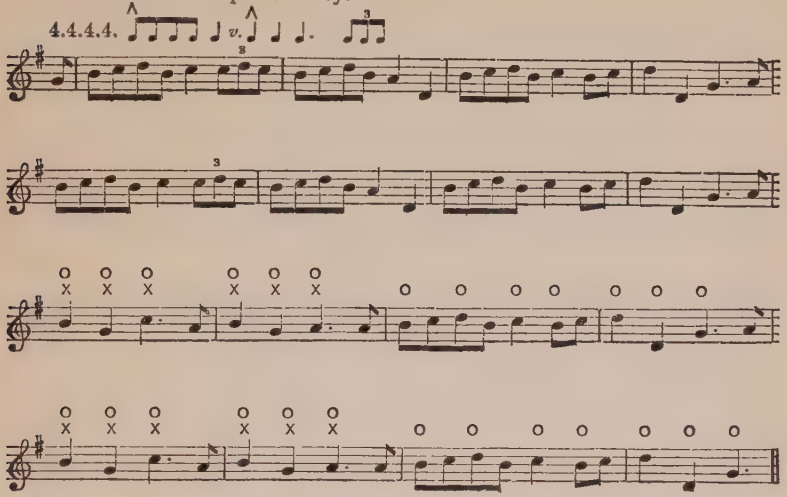


(2) *Grazioso.* 4.4.



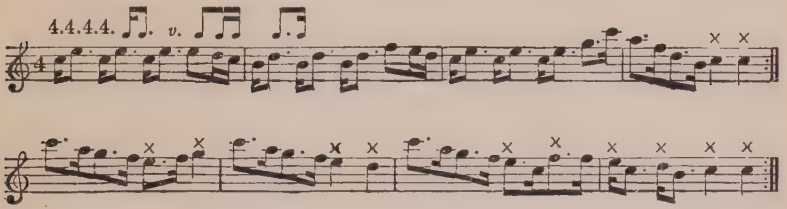
Morris Dance.* Shepherd's Hey.

4.4.4.4.



Morris Dance.* Rigs O' Marlow.

4.4.4.4.



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* By permission of Messrs. Novello & Co., Ltd. From "Morris Dance Tunes," Set II, The signs O and X signify respectively hand-clapping and stick-rapping.

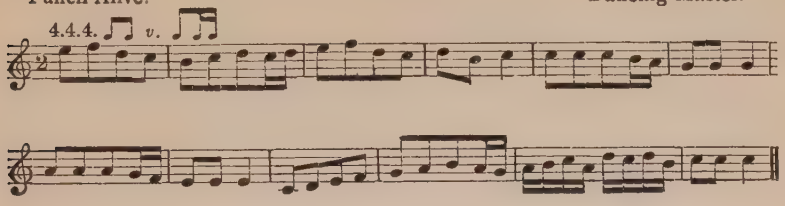
## ANALYSIS OF TIME-OUTLINE IN ENGLISH DANCE-TUNES OF THE 17TH AND 18TH CENTURIES

The following tunes are not given as examples of folk-song or as *quasi* folk-song, and into the question of their origin it is needless here to enter. Their purpose is at least as interesting and more certain. These tunes were not printed and published for the people but for the educated classes, and there can be little doubt that we have here the actual tunes to which danced the country squires and dames of the seventeenth and eighteenth centuries, a fact to which some of their names testify. And apart from their historical interest, the tunes have an intrinsic value. Upon the whole they represent natural conditions of time-outline that are instrumental rather than vocal; there is less freedom of phrase, but more elaboration of time-figures uninfluenced by words than is found under purely vocal conditions; equal outline rarely appears unvaried, and the basis of the free figure is nearly as common as that of the strict. They are tunes that will repay thorough analysis.

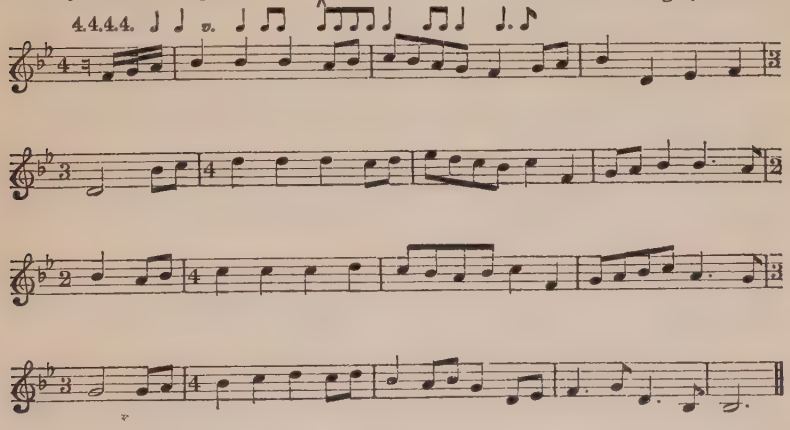
"The Three Sisters" and "Helston Furry Dance" are of later date and are tunes that do claim to have come direct from the people. The former has the natural grace of a folk-song, and might well be one, the latter is a version of the well-known Cornish folk-dance which has a lengthened opening phrase of three bars instead of the usual two-bar one, which is found in "Songs of the West." It is more than likely that we have here the original version of the tune, to which the free phrase lends a considerable charm. The earlier printed version of Davies Gilbert's, 1823, does not contain it, but in all respects this is a stiff and inferior tune.

## Section U.—The Basis of Equal Outline, varied with Figures, Strict or Free.

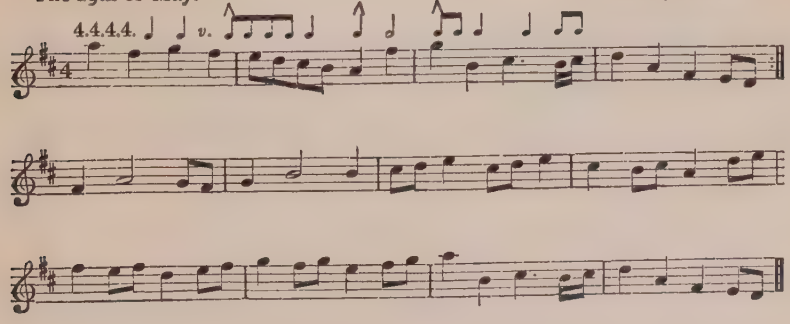
Punch Alive. "Dancing Master."




Lady Nevil's Delight. "Musick's Delight," 1666.

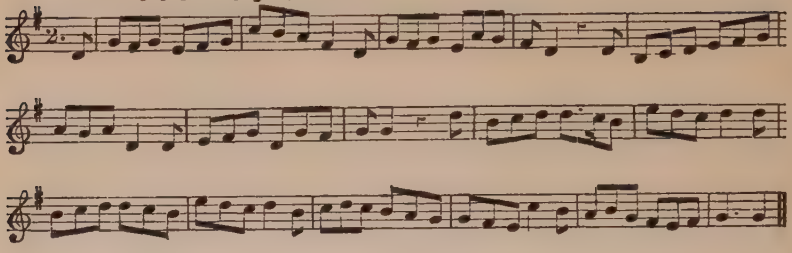



The 29th of May. "Dancing Master."



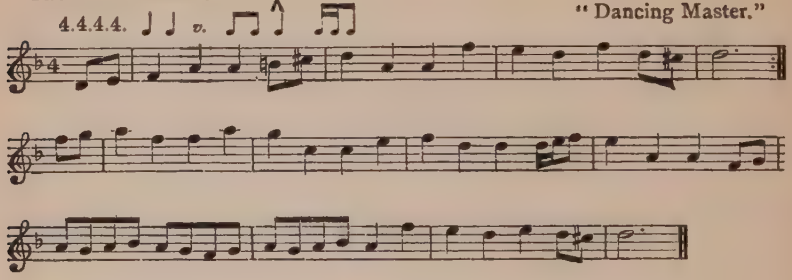
Dance.

4.4.4.4. *v.*



The Bashful Swain.

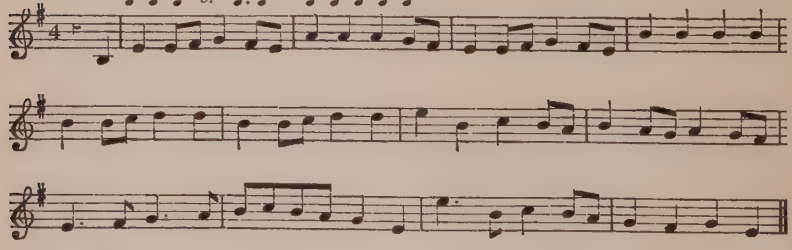
4.4.4.4. *v.* "Dancing Master."



## Section V.—The Basis of the Strict Figure, varied by other Figures, Strict, Free, or Equal.

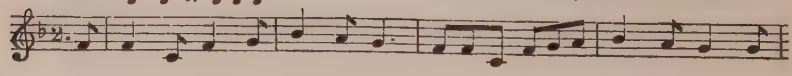
O Good Ale.

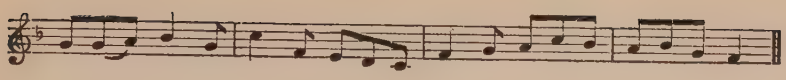
4.6.2. *v.*



The Three Sisters.

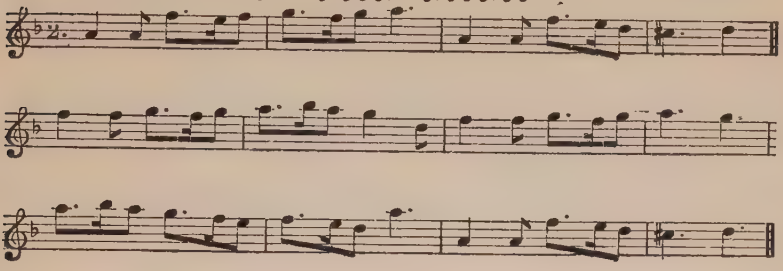
2.2.4. *v.* "Christmas Carols," Davies Gilbert.





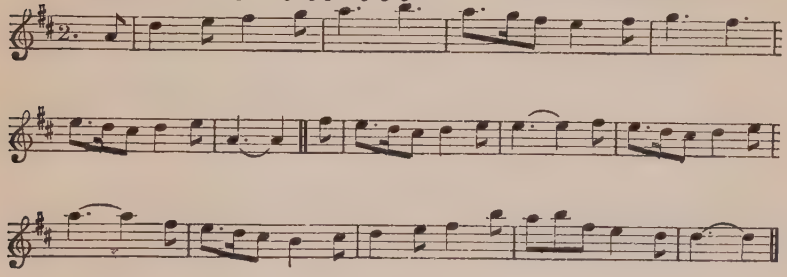
Lulle me beyond thee.

2.2.2.2.2.2. "Dancing Master."



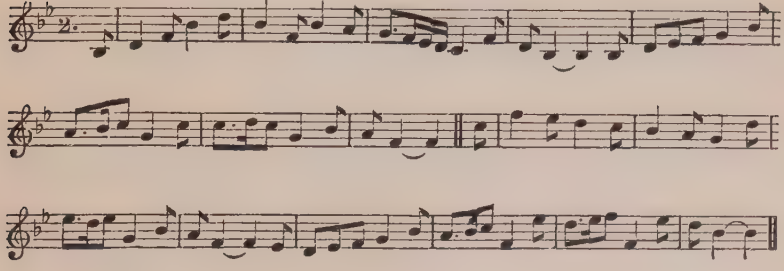
Parthenia.

6.2.2.4. "Skill of Music," PLAYFORD.

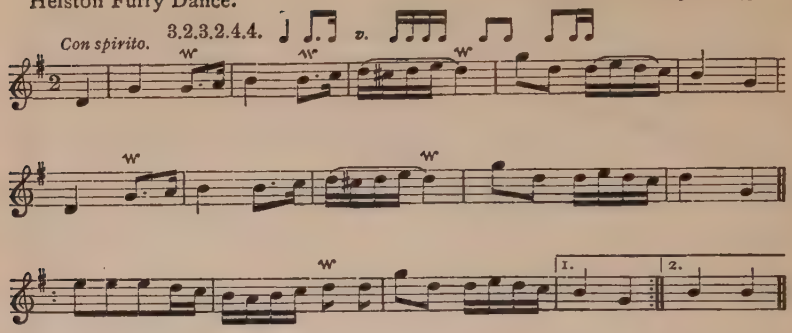


The Dame of Honour.

4.4.4.4. D'URFEY, 1719.

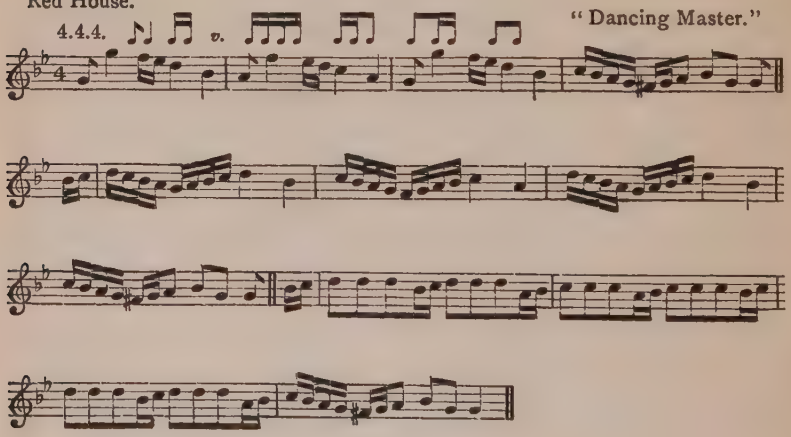


Helston Furry Dance. "Cornish Itinerary," 1845.

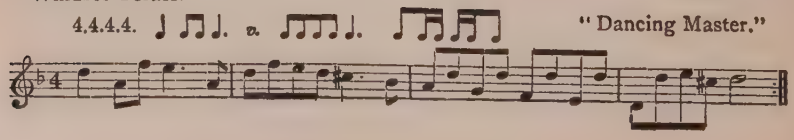


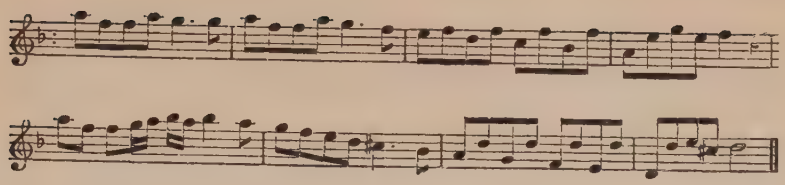

## Section W.—The Basis of the Free Figure, varied by other Figures, Strict, Free, or Equal.

Red House. "Dancing Master."

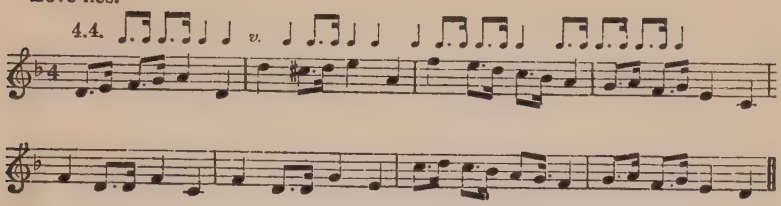



Windsor Terass. "Dancing Master."



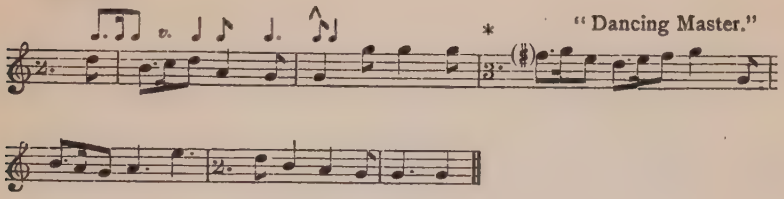


Love lies.



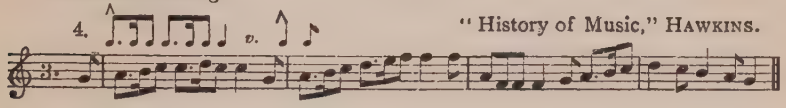
The Whish.

"Dancing Master."



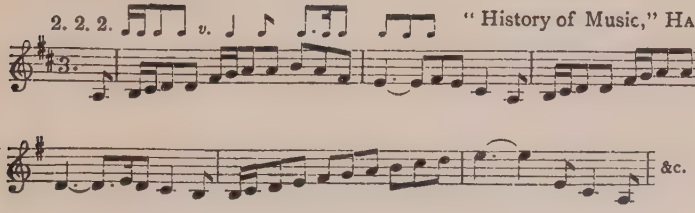
Old Simon the King.

"History of Music," HAWKINS.



Sir Roger de Coverley.

"History of Music," HAWKINS.

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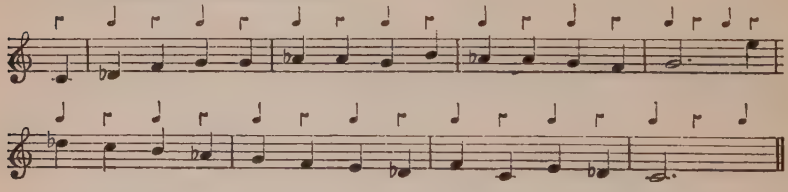
* This barring is chosen as indicating the natural accents of the tune which is unbarred in this version.

## TIME-TYPES OF THE EAST

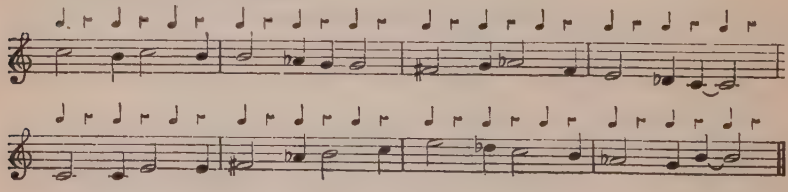
This section illustrates the range of the Hindu tala from simple conditions hardly to be distinguished from the European bar up to the most complicated units. It should be remembered that the melodies are entirely unaccented; a European time-signature would thus give a false impression. *Ekátála* has been rendered into $\frac{6}{8}$ and also $\frac{3}{4}$; and either of these readings is equally incorrect. The melody here given appears to contradict the tala, but when sung it would scarcely convey more than an effect of slight variation upon it. No attempt has hitherto been made to indicate the more elaborate talas in European notation. The difficulty of singing a melody against the eccentric regularity of *Tala Ara* will be appreciated by musicians. The melody is here noted as in the Hindu record without reference to bar-beats; the position of each beat being indicated by the tala-notation.

### Section X.—Hindu Talas and Melodies.*

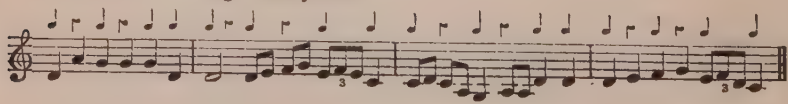
Tala Thoongree. Raga Jogeeah.



Tala Ekátála. Raga Parajica.

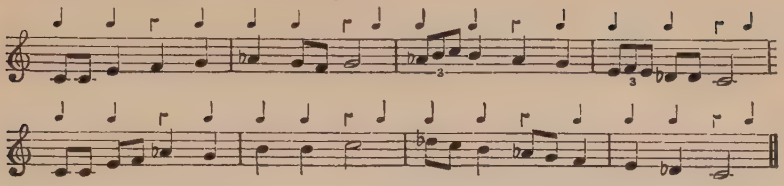


Tala Chawtála. Raga Chhayanata.

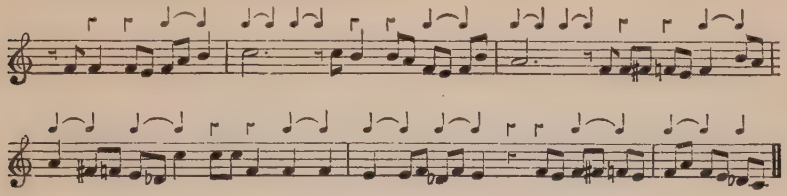


* From "Hindu Melodies," and "Seven Principal Musical Notes," S. M. Tagore.

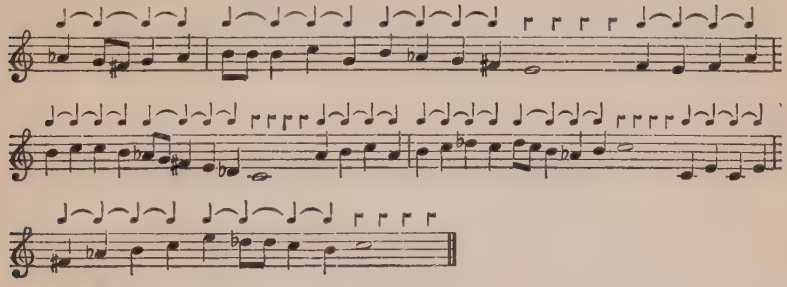
Tala Drutatritálee. Raga Kalingara.



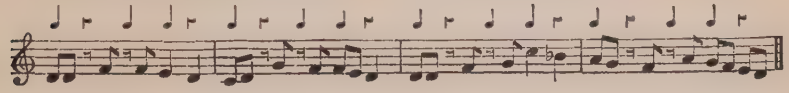
Tala Madhyamána. Raga Basanta.



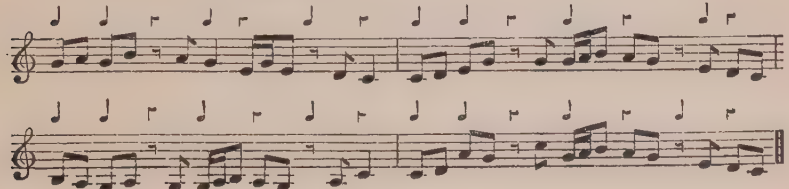
Tala Slathatritálee. Raga Paraja.



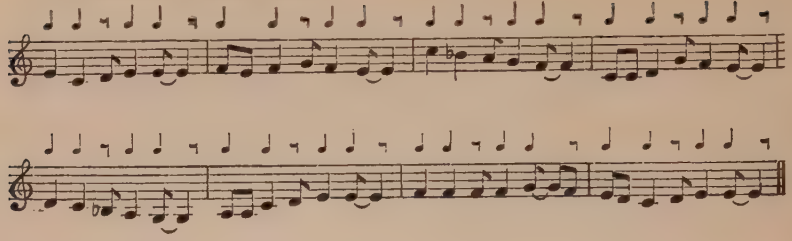
Tala Surphakta. Raga Surata.



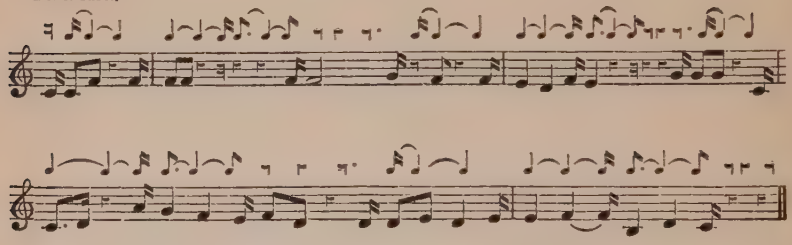
Tala Ara-chawtála. Raga Bibhasa.



Tala Jhanptála. Raga Jhighiti.



Tala Ara.

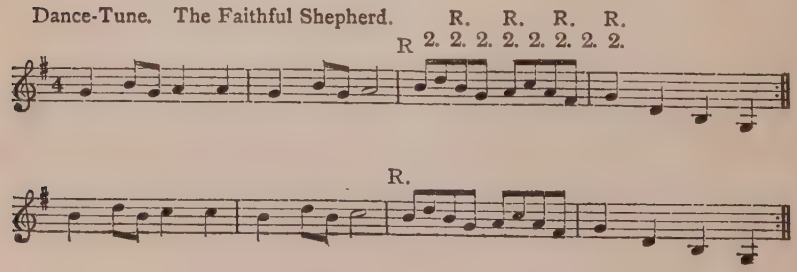


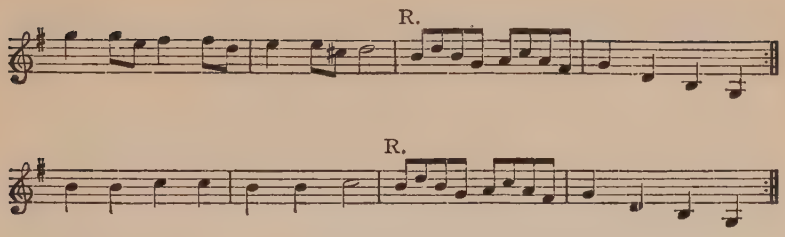
## THE ELEMENTARY RONDO TYPE

In this section the refrain of the Rondo is indicated by the letter R. Sometimes this also forms the opening theme. The Ballad rondos have been already described.

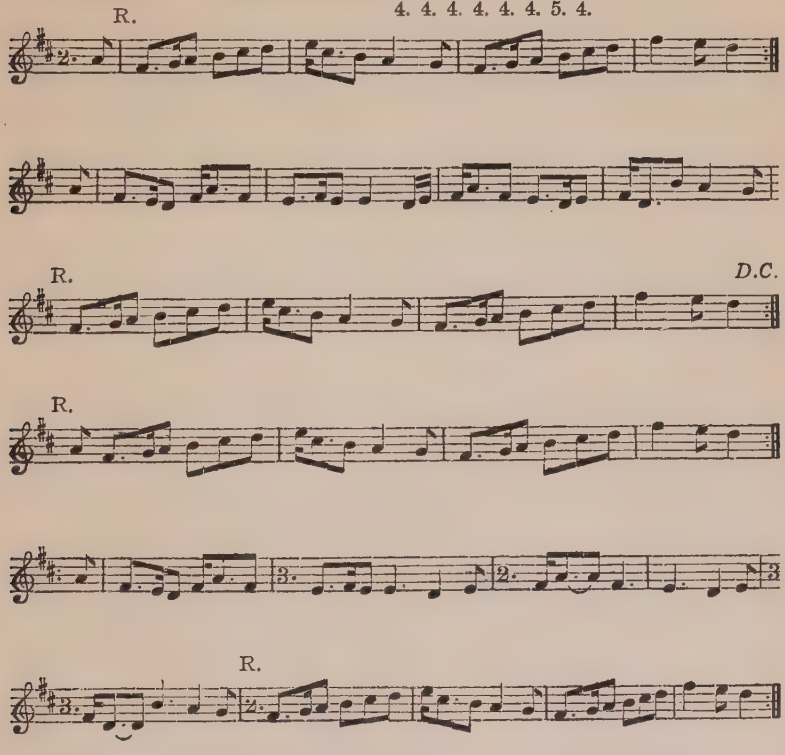
### SECTION Y.—ENGLISH, CHINESE, AND HINDU RONDOS.

Dance-Tune. The Faithful Shepherd.

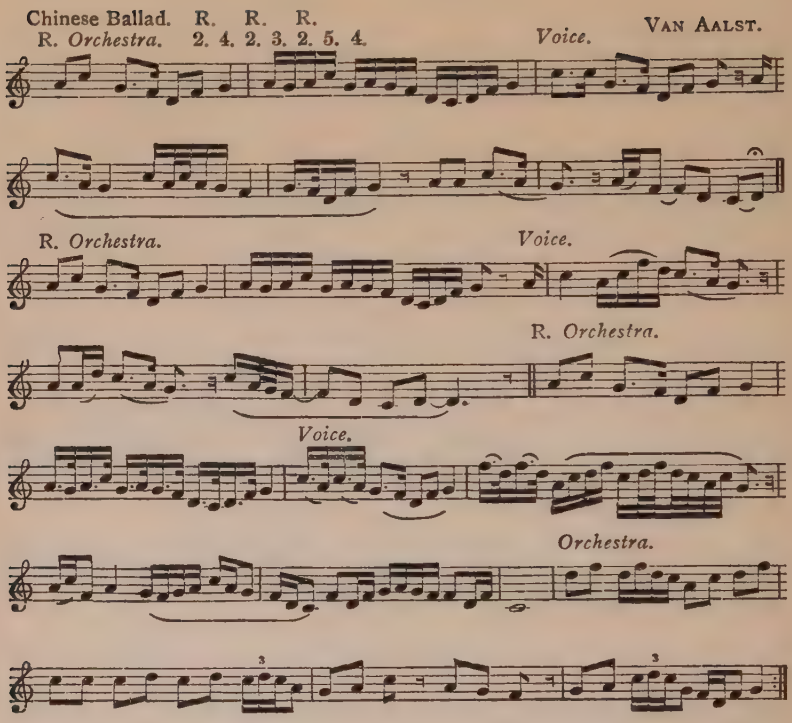


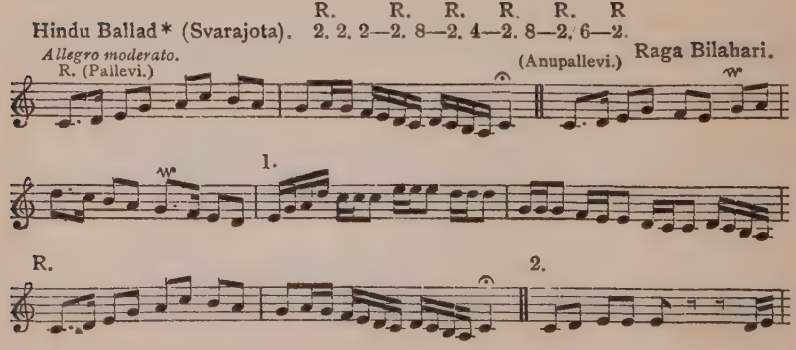



Morris Dance.* Laudnum Bunches. R. R. R. R. R. R.
4. 4. 4. 4. 4. 4. 5. 4.

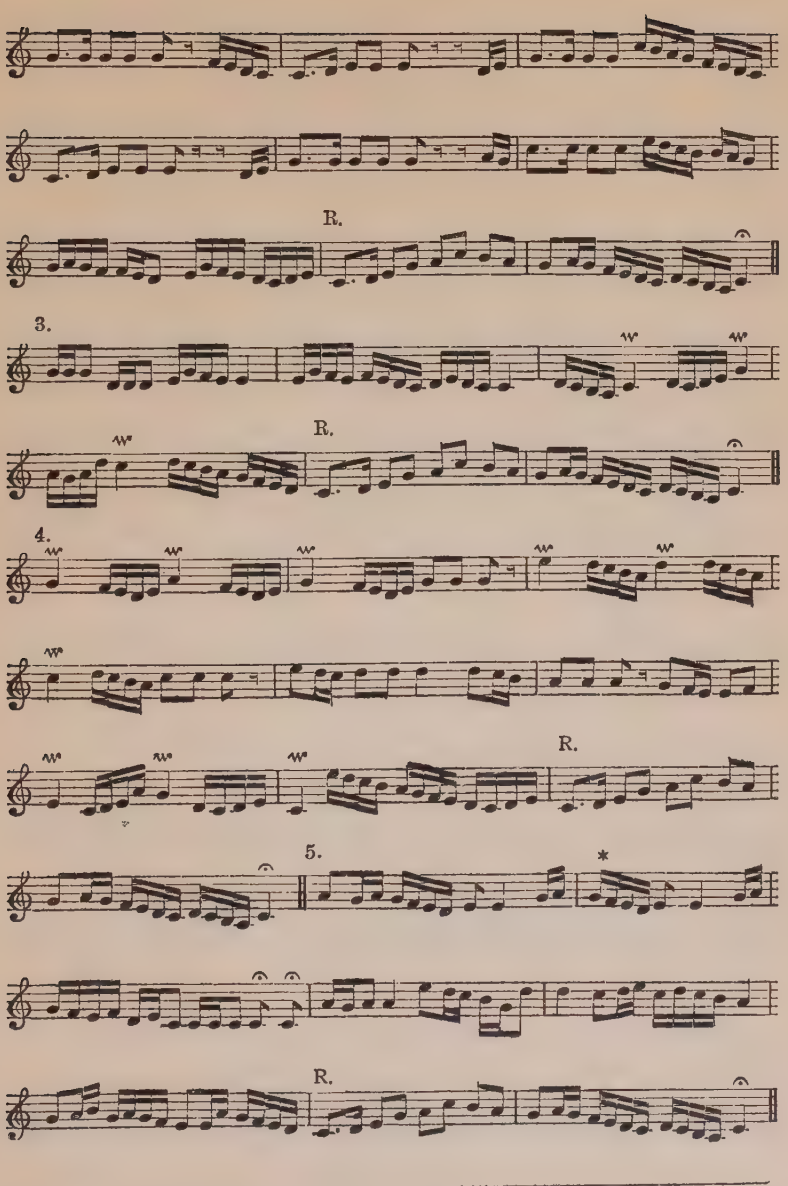



* By permission of Messrs. Novello & Co. Ltd. From "Morris Dance Tunes," Set I.




* From C. R. Day's, "Music and Musical Instruments of Southern India and the Deccan." By permission of Messrs. Novello & Co., Ltd.



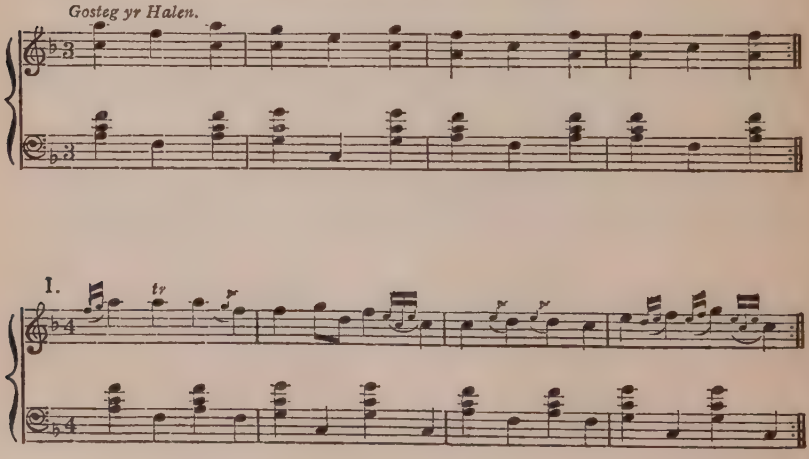

* An incomplete bar.

## THE ELEMENTARY VARIATION TYPE

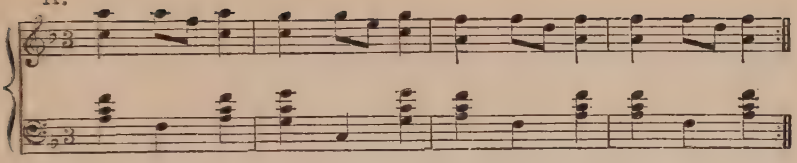
The following movement has been transcribed by the Author from the original letter notation as printed in "Myvyrian Archæology of Wales." It is in many respects the most concise, satisfactory and the least florid among many examples, some of which with their ceaseless reiteration of equal beat-figures of a few notes, suggest five-finger exercises rather than variations. Monotony pervades the whole range of the music, a fact which goes far to prove its authenticity. The grace-notes here given are practically a safe reproduction, but the sign which is construed by the shake is of uncertain interpretation; the shake appears likely, because it is difficult to see what else could have been intended. A reproduction of the opening bars in the original notation is given in the article on "Wales" in Grove's Dictionary.

### Section Z.—An Early Welsh Movement in Variations.

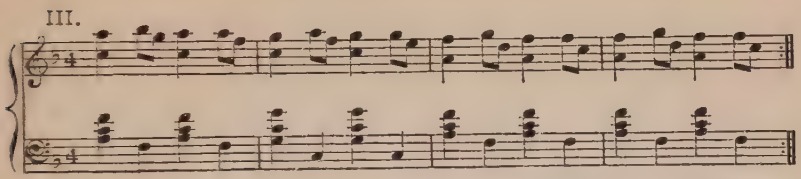
The Prelude to the Salt. Measure Mac Mwn Byr. 11001111.



II.

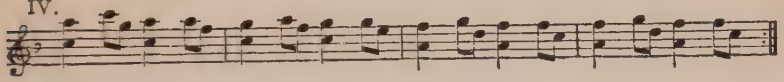


III.

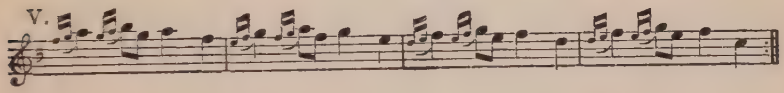


The Bass of III. continues.

IV.



V.



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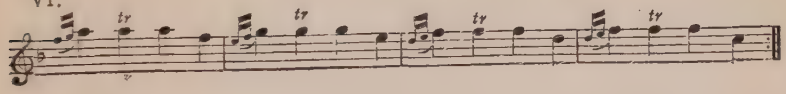

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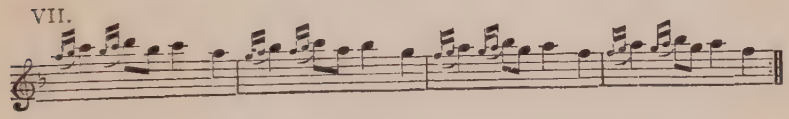

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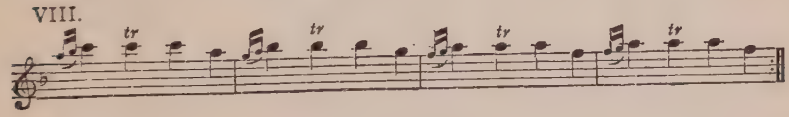

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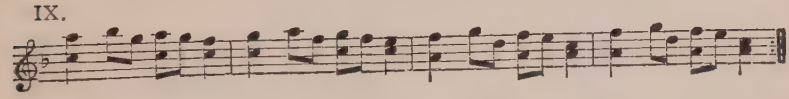

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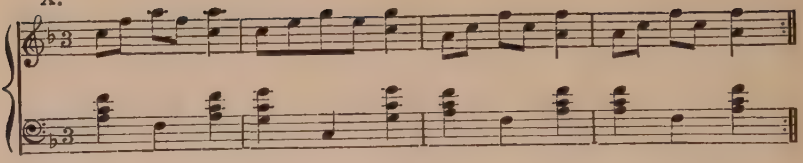

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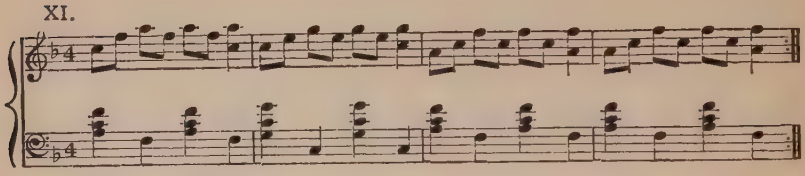

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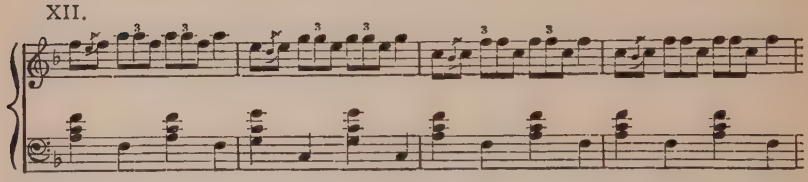

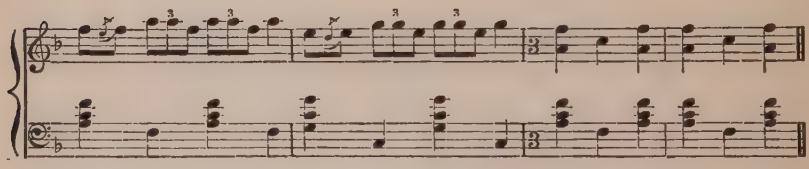

Here ends "The Prelude to the Salt," which used to be performed before the knights of King Arthur, when the Salter was placed upon the board.

# GLOSSARY OF TECHNICAL TERMS USED IN THIS WORK

*This mark (*) indicates new or partially new terms, or the new use of a term.*

*Absolute Pitch* . . . Actual pitch according to a given number of vibrations.
*Accent* . . . . . Stress.
*Accidental* . . . . . The written inflection of a note by semitone.
*Alto* . . . . . The upper middle part.
**Atonic* . . . . . Composed of tones other than those of the tonic triad.
*Augmented* . . . . One semitone longer than major or perfect.
*Augmented Triad* . . The triad composed of two major thirds, covering an augmented fifth.

*Bar* . . . . . The space between two principal accents.
**Bar-figure* . . . . . A time-figure that relates to the bar-standard.
*Bar-line* . . . . . The vertical line dividing one bar from the next.
*Bass* . . . . . The lowest part.
*Beat* or *Time-beat* . . A recurring point marking equal divisions of duration.
**Beat-figure* . . . . . A time-figure confined to division of one beat.

*Cadence* . . . . . A point of rest in circling rhythm.
*Canon* . . . . . A contrapuntal type of form, based on continuous imitation.
**Centering* . . . . . Proceeding within the key.
*Chaconne* . . . . . An obsolete variation-type, founded upon a dance of the same name.
*Chord* . . . . . A harmonic unit of tone-material.
*Chord of the Ninth* . . A chord of four thirds, covering a ninth.
*Chord of the Seventh* . A chord of three thirds, covering a seventh.
*Chromatic* . . . . . (1) A semitonal variation in diatonic outline; (2) movement by semitone.
**Circling Rhythm* . . . The rhythm that gravitates to or radiates from a centre.

*Clef* . . . . . A sign indicating the absolute pitch of the line of the stave on which it is placed.

**Colour-outline* . . . . Tone-succession in quality.

*Concerto* . . . . . A cycle for a solo instrument with orchestra.

*Consonant* . . . . . Composed of a synchronous third, sixth, or fifth; a major or minor triad; successions of thirds or sixths; successions of triads in first inversion.

**Continuous Style* . . . Music lacking stanza divisions and formal contrasts of tempo.

*Contrapuntal* . . . . Parts proceeding simultaneously upon a consonant basis.

*Contrapuntal Bass* . . A melodic part in the bass.

*Counterpoint* . . . . The science of combining moving parts by relations of intervals.

**Cycle* . . . . . Any succession of movements, with or without stanza divisions, that has contrasts of tempo between one movement and another.

*Degree* . . . . . A fixed point in pitch.

*Diatonic* . . . . . Limited to the melodic key.

*Diatonic Scale* . . . The melodic key.

*Diminished* . . . . One semitone less than minor or perfect.

*Diminished Triad* . . The triad composed of two minor thirds.

**Discant* . . . . . A combination of moving parts without a consonant basis.

*Discord* or *Dissonance* . (1) Any interval that contradicts those of the consonant triad; (2) consecutive fifths.

*Dominant* . . . . . The fifth degree of the scale.

*Drone* . . . . . The continuous sounding of one note, usually against a melody.

**Dual Beat* . . . . . The equal division of the beat.

*Duration* . . . . . Degree of length of a tone.

*Eleventh* . . . . . The repetition of the fourth at octave distance.

**Equal Outline* . . . Successive tones of similar value.

*Fifth* . . . . . An interval composed of two thirds.

*Figure* . . . . . The smallest free unit of music.

*Flat* . . . . . A sign lowering the pitch by a semitone.

**Force-outline* . . . . Tone-succession in intensity.

**Form* . . . . . The relation of parts to the whole by means of recurrent (rhythmic) combination and balance of many varying units.

*Fourth* . . . . . The inversion of the fifth.

**Free* . . . . . Informal, at irregular intervals.

**Free Form* . . . . . Form based upon inexact recurrence of units.

*Fugue* . . . . . A contrapuntal type of form, based on imitation of units.

**Full-tone* . . . . . The normal interval of the diatonic scale.

*Ground* . . . . . A variation-type, in which a phrase-outline in the bass formed the unit of repetition.

*Harmonic Bass* . . . The lowest tone of each chord in the normal position.

*Harmonic Cadence* . . Pause on the tonic triad, or partial pause on the dominant or other chords.

*Harmony* . . . . . Chord-succession.

*Idea* . . . . . A free unit composed of figures.

**Idiom* . . . . . The recurrence of figures in the same part.

*Imitation* . . . . . The recurrence of figures (or a complete outline) by transference from part to part.

*Intensity* . . . . . Degree of force of a tone.

*Interval* . . . . . The distance in pitch from one tone to another.

*Inversion* . . . . . The placing of an upper tone in the bass.

*Key* . . . . . The relation of tones to a consonant centre.

**Key-circle* . . . . . The relations of keys.

*Key-note* or *Key-tone* . The tonic note.

*Key-signature* . . . . The indication of the number of sharps or flats required to form a scale upon the pattern of the scale of C.

*Leading-note* . . . . The seventh degree of the scale, a semitone below the tonic.

*Madrigal* . . . . . A vocal type of form, partly contrapuntal, partly rhythmitonal.

*Major* . . . . . The larger of the two normal intervals, hence applied to the standard type of key depending on the major third.

*Major Triad* . . . . Composed of one major and one minor third, with the major third below.

*Mediant* . . . . . The third degree of the scale.

*Melodic Cadence* . . . Pause on the tonic note, or partial pause on other tones of the scale.

*Melody* . . . . . (1) A small circling type dependent upon figure, phrase, and stanza; (2) an isolated outline in harmonic music.

**Metamorphosis* . . . Changes in time-outline, with repetition of pitch-outline.

**Microtonal* . . . . . Containing intervals smaller than the semitone.
*Minor* . . . . . The smaller of the two normal intervals, hence applied to that variation upon the standard key which depends upon the minor third.
*Minor Triad* . . . . Composed of one minor and one major third, with the minor third below.
*Minuet* . . . . . A small stanza movement, founded upon song-type.
**Mixophonic* . . . . Parts proceeding simultaneously without regard to consonance.
*Mode* . . . . . The relative pitch of the scale.
*Modulation* . . . . A change of key.
*Modulative* . . . . Passing from key to key.
*Motett* . . . . . A vocal type of form, contrapuntal and ecclesiastical.
*Movement* . . . . . (1) Motion ; (2) a separate division of a musical work, corresponding to a canto of poetry or an act of the drama.

*Natural* . . . . . The sign revoking the sharp or flat.
*Ninth* . . . . . The repetition of the second at octave distance.
*Note* . . . . . The written tone ; also synonym for tone.

*Octave* . . . . . The point where the pitch of a tone repeats itself.
*Opera* . . . . . A vocal and orchestral composition combined with the drama, formerly a cycle, now usually continuous in style.
*Oratorio* . . . . . A vocal and orchestral composition, united with a religious text, of an anomalous cyclic character.
**Outline* . . . . . The succession of tones.
*Overture* . . . . . Generally understood to be a single movement in sonata-type for orchestra ; originally a cycle of small movements.

*Part* . . . . . That which is composed or written for a single voice or instrument, incomplete in itself.
*Pedal* . . . . . The continuous sounding of tonic or dominant tones against atonic chords.
*Perfect* . . . . . Without variation of major or minor.
**Phrase* . . . . . The grouping of strict accents.
**Phrase-outline* . . . The time- and pitch-outlines contained within the phrase.
*Pitch* . . . . . Degree of height of a tone.
**Pitch-figure* . . . . A fraction of pitch-outline forming a unit.
**Pitch-idiom* . . . . The recurrence of a pitch-figure in one part.

**Pitch-imitation* . . . Transference of a pitch-figure from one part to another.

**Pitch-outline* . . . . Tone-succession in pitch.

**Polyphony* . . . . . The development of synchronous pitch-outline upon the natural basis of chord-conception.

**Pulsative Rhythm* . . The rhythm of the beat.

*Quality* . . . . . That which distinguishes the tone of one voice or instrument from another.

**Raga* . . . . . A tonalitive type, employing time-outline to emphasise its pitch-relations.

*Recitative* . . . . . A melodic vocal usage, in which the lingual element predominates over the musical.

*Rest* . . . . . The written sign for duration of silence.

**Rhythm* . . . . . The periodic or recurring quality of all movement.

**Rhythmitonal* . . . . Composed of tones conditioned by rhythm.

*Rondo* . . . . . A rhythmitonal type of form with a recurrent subject.

*Root* . . . . . The harmonic bass of a chord.

*Round* . . . . . A melody, which, sung by several voices in imitation, phrase by phrase, makes harmony when all its phrases are heard at once.

*Scale* . . . . . The name-order in pitch of musical tones.

**Scale-tone* . . . . . The first degree of the scale.

*Scherzo* . . . . . A movement in rapid tempo, frequently in song-type.

*Score* . . . . . The written combination of parts.

*Second* . . . . . The interval of the scale.

*Semitone* . . . . . Half a full-tone.

*Sequence* . . . . . A species of pitch-idiom.

*Seventh* . . . . . The inversion of the second.

*Sharp* . . . . . A sign raising the pitch by a semitone.

*Sixth* . . . . . The inversion of the third.

*Slur* . . . . . The line that indicates the phrase, or sometimes the figure.

*Sonata* . . . . . A cycle of movements composed of various rhythmitonal types for one or two instruments.

**Sonata-type* . . . . The type commonly known as "binary" or "first-movement form."

*Song-type* . . . . . Consisting of statement, contrast, and re-statement, usually in three divisions.

**Standard* . . . . . The fixed tone-material of music.

**Stanza* . . . . . Two or more phrases defined by a cadence.

*Stave* or *Staff* . . . . The group of lines on which notes are written.

**Strict* . . . . . Formal, at regular intervals.
**Strict Accent* . . . . The accent of the bar.
**Strict Form* . . . . Form based upon exact recurrence of units.
*Subdominant* . . . . The fourth degree of the scale.
*Subject* . . . . . A musical idea.
*Submediant* or *Super-dominant* . . . The sixth degree of the scale.
*Suite* . . . . . (1) A cycle of small contrapuntal movements named after dances; (2) the name for the orchestral cycle on a small scale.
*Supertonic* . . . . . The second degree of the scale.
*Suspension* . . . . . A species of melodic discord, formed by retardation of a tone.
*Symphonic Poem* . . Music in continuous style for orchestra, usually associated with poetry.
*Symphony* . . . . . The name for the orchestral cycle on a large scale, formerly built upon types.
*Syncopation* . . . . Reiteration of a tied figure, which annuls the strict accent.
**Syntonic* . . . . . Music consisting of the three tones of the tonic triad.

**Tala* . . . . . The unit of the Eastern time-system.
**Tala-bar* . . . . . The bar containing the tala and determined by it.
*Tempo* . . . . . Speed.
*Tenor* . . . . . The lower middle part.
*Tenth* . . . . . The repetition of the third at octave distance.
**Ternal Beat* . . . . The division of the beat into three parts.
*Tetrachord* . . . . . Three or four notes in succession, covering a fourth.
*Theme* . . . . . A musical idea.
*Third* . . . . . The interval of the chord.
*Tie* . . . . . A sign between two notes indicating that they are a single tone.
*Time* . . . . . (1) The number of beats in a bar; (2) beat-division.
**Time-figure* . . . . A fraction of time-outline, not less than one beat forming a unit.
**Time-idiom* . . . . The recurrence of a time-figure in one part.
**Time-imitation* . . . Transference of a time-figure from part to part.
**Time-outline* . . . . Tone-succession in duration.
*Time-signature* . . . The indication of the number of beats in a bar and the beat-division.
*Tonality* . . . . . The relations of all tones to a given centre.
**Tonalitive* . . . . . Pertaining to tonality.
*Tone* . . . . . The name given to the sounds used in music.

**Tone-material* . . . . The variations of tone forming the material of music.
**Tone-movement* . . . Combination of outlines.
*Tonic* . . . . . The melodic or harmonic centre of pitch-relations.
*Transposition* . . . . Change of absolute pitch-level.
*Treble* . . . . . The highest part.
*Triad* . . . . . A chord of two thirds, covering a fifth.
*Triplet* . . . . . A group of three notes of equal value.
*Tritone* . . . . . Three full-tones in succession.
*Twelfth* . . . . . The repetition of the fifth at octave distance.
**Type* . . . . . A melodic or harmonic formula.
**Type of Form* . . . . A familiar and generally accepted plan for a movement.

**Undulating* or *Free Rhythm* The rhythm of wave-motion.
**Unit* . . . . . Any part of musical material that is perceived to recur.

**Value* . . . . . The relative duration of a tone.
*Variations* . . . . . A rhythmitonal type founded upon repetitions of a melodic or harmonic outline.

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